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# SLIDING DOORS

he University of Kansas in Lawrence has always seemed like a slightly mythological place to me. Although I'd traveled the Eastern Seaboard with my family. I reached my late teens without ever having been west of Pennsylvania. When it came time to look for a college or university, my mother had her heart set on two Western Massachusetts schools and my guidance counselor suggested a small liberal arts college hundreds of miles away in Western New York, but I thought I might go to Kansas and study science fiction with the even more mythological entity. James Gunn.

James Gunn had authored The Listeners. A book I'd treasured and reread. I'd given it to my (Unitarian) minister to read and shelved it alongside the works of Samuel Delany, Thomas M. Disch, Ursula K. Le Guin, James Tiptree, Jr., and Roger Zelazny—all writers who'd made deep impressions upon my teenage mind. My father had tried to introduce me to Professor Gunn at a Worldcon, but I'd been way to terrified to talk to someone

I so much admired.

I so much admired.
As it turned out, I shatted five hundred with college acceptances. To my relief, I did not get into the local schools. While these rejections broke my mother's heart, they meant that I was free to follow Horace Greeley's advice—at least a little of the way. I was deeply torn between my two choices. As one of the shyest seniors ever to contemplate going off to college, I was warned that I'd be lost at a large university. I was reassured that I would blossom at a small school. Though I was still wavering, the final blow came when someone planted the fear that I might not even get into the SF course at KU.

So I turned my back on the Jayhawks and went to a small liberal arts college in Elmira, New York. Wonderful things happened there. I founded the science fiction club, just as I had in high school, and got to interview Gene Roddenberry for the school newspaper. I met supportive college teachers and even got to take a course in SF from two science profs. Then, after a series of adventures, I became the editor of this magazine. Still, I've often wondered what path my career would have taken if I'd chosen the other road.

I managed to get to Kansas once or twice, and finally met and even published Jim Gunn, but I'd never found the ruby slippers that would take me to the University of Kansas, Then, on June 1 of this year. Jim sent me a personal invitation to the annual Campbell Conference. The John W. Campbell Memorial Award for SF novel and the Theodore Sturgeon Award for short story are bestowed at the conference. A couple of Asimov's stories from 2010-Steve Rasnic Tem's "A Letter from the Emperor" and Geoffrey A. Landis's "The Sultan of the Clouds"-were on the Sturgeon Award ballot and Jim thought it would be nice if I could be there for the ceremony.

I was delighted to accept Jim's invitation. Having become reacquainted with the college atmosphere while touring schools with my seventen-year-old daughter during the past year, I felt at home the moment I set foot on the KU campus. I arrived on Thursday, July 7, and was almost immediately whisked off to Watson Li-

brary for a special presentation.

After a lovely reception, Noël Sturgeon, Theodore Sturgeon's daughter and trustee of the Sturgeon Literary Trust collection, announced that the definitive collection of Theodore Sturgeon's books, papers, manuscripts, and correspondence had been bestowed on KU's Kenneth Spencer Research Library, Guests at the reception were allowed to peruse correspondence between Ted Sturgeon and writers like Clifford Simak, Isaac Asimov,

and Ray Bradbury. Ted Sturgeon suffered from long periods of writer's block, and one long letter from Robert Heinlein was filled with wonderful story ideas that he was gifting to his friend.

After the festivities, I revisited my college days as a biker's girlfriend (if my boyfriend's 250cc possibly counted as a motorcycle) by accepting a ride to a local restaurant on the back of Chris McKitterick's scooter. Chris is a writer and the director of KU's Center for the Study of Science Fiction. The center was founded by James Gunn, and it is the nexus for all the amazing SF workshops, classes, and conferences that take place at the university. I'll go into more detail about the SF prorams at KU in next month's editorial.

The Campbell Conference is held under the center's aegis and the next evening I attended the conference's award ceremony and banquet. Noël presented the Sturgeon Award to Geoff Landis, who attended the conference with his wrife, Mary Turzillo. Writer and scholar Elizabeth Anne Hull presented the Campbell Award to Ian McDonald for his novel The Dervish House. Other participants and guests at the conference included Kij Johnson, Robin Wayne Bai-included Kij Johnson, Robin Wayne Bai-

lev. and Bradlev Denton.

While nurturing writers like Kij, Chris, and Brad, as well as John Kessel, Pat Cadigan, and many others, James Gunn established a vibrant home for the study of science fiction. I'd love to go back to Lawrence and spend a lot more time among the collections. In addition to Ted Sturgeon's letters, I could wend my way through the papers of Brian Aldiss, Algis Budrys, Cordwainer Smith, and A.E. Van Vogt. I could spend hours in the center's own SF library and sit in on some of the classes and workshops. It's too bad I don't have nearly enough time to pick up a Ph.D. in science fiction.

In the alternate universe where I slid open the door that led to the University of Kansas when I was seventeen, I'm sure I studied SF with Jim. I had adventures and I blossomed. I'm almost certainly active in the field of science fiction today. Perhaps I'm even the editor of Asimon's Science Fiction magazine.

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# THE STRANGE CASE OF THE PATAGONIAN GIANTS

few months ago I wrote about Sir John Mandeville, the lively fourteenth-century writer whose book of travels told many a tale of purported wonders in far corners of the earth; cannibals thirty feet high, and men without heads who had their eyes in their shoulders, and the like. Mandeville, who may never have seen any of the world beyond western Europe, was essentially a medieval fantasist, writing at a time when little of our planet had been properly explored. His purpose may simply have been to entertain. But what can one say about a real explorer who comes back from afar and tells us a tall tale of Mandevillean wonders that he claims to have encountered in his vovaging?

Consider, if you will, the case of the

Patagonian giants-a tall tale in the

most literal sense-that kept Europeans buzzing for nearly three hundred years. It originated with Antonio Pigafetta, the Italian gentleman who sailed with Magellan on his pioneering voyage of circumnavigation in 1519 and was the official chronicler of the expedition. In June 1520, Pigafetta wrote, when the explorers were traveling in high latitudes along the eastern coast of what is now called South America, they came upon a strange figure of colossal size "singing and dancing on the sand." Magellan sent some men ashore to inspect him. "This man," we are told, "was so tall that our heads hardly came up to his belt. He was well formed; his face was broad and colored with red. excepting that his eyes were surrounded with vellow," Pigafetta estimated his

height at about eight feet. Magellan gave

him some bells, a comb, and a pair of

glass beads. This encouraged other giants

to appear—eventually eighteen in all, including some females, also gigantic in

size. Magellan captured several to take

back to Spain as curiosities, but they died soon afterward aboard his ships.

Pigafetta's account of the giants, whom Magellan called patagones, meaning "big feet," caused a great sensation in Europe, creating far more commotion than the successful circumnavigation itself, and thereafter every expedition to that part of the world—the name "Patagonia" having become attached to the place where they dwelled—made a point of looking for the Patagonian giants, with highly variable results.

Sir Francis Drake, the second circumnavigating voyager, saw them too in 1578, although the first account of the journey, published fifty years later, asserts that they were seven and a half feet tall at most. A Spanish captain, Pedro Sarmiento, claimed to see giants in the same area in 1580, according to the not entirely trustworthy historian of his voyage. An equally unreliable narrator, Anthony Knyvet, who accompanied the circumnavigator Thomas Cavendish in 1592, wrote of two Patagonians twelve feet tall, and a boy whose height was over nine feet. Willem Schouten and Jacob Le Maire, two Dutch circumnavigators. touched down in Patagonia in 1615 and found some graves made of heaped stones, one of which they opened and saw within it "the bones of human beings ten and eleven feet in stature." And there were other similar reports.

On the other hand, Sir John Narborough, who spent ten months on the Patagonian coast in 1670, found no giants: "The natives," he declared, "are not taller than generally Englishmen are." Seventy years later, another British expedition concluded that the Patagonians "are people of a middle stature . . . tall and well-made, being in general from five to six feet high." But the older tales of gi-

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ants persisted, and some theories had it that Patagonia was inhabited by two races, one gigantic, the other of normal size.

One of the purposes of Commodore John Byron's circumnavigation of 1764-66 was to secure more information about these people. We are now well along in the eighteenth century, definitely a postmedieval era, and it is reasonable to think that Byron, a tough, experienced skipper nicknamed 'Foul-Weather Jack' who was the grandfather of the poet, would have brought back reliable information. But in fact the various accounts left the situation more confused than ever.

The first news to come from the Byron expedition was contained in a letter to the minister in charge of British naval affairs, Lord Egmont, that Byron wrote from Patagonia and carried with him to London when he returned in May 1756. In it he called the Patagonians "people who in size come the nearest to giants of

any people I believe in the world." He did not specify any heights. But an article in the Gentleman's Magazine published two days after his return asserted that they were eight and a half feet tall, and the London Chronicle, three months later, said, "We are informed that the giants found by Commodore Byron measured from eight feet and one half to ten feet in height, and every way stout in proportion. The men's feet measured eighteen inches."

There was great furor everywhere. The French, then locked in bitter maritime rivalry with England, insisted the tale was a hoax designed to distract attention from the fact that the British were exploring those regions in preparation for an attack on French possessions in the New World—not an implausible idea, since England was already organizing a new expedition under the command of Samuel Wallis and Philip Carteret for approximately that purpose. In 1767, the London Chronicle reported that Wallis

and Carteret, following Byron's route, had encountered "some thousands" of giants, ranging in height from seven to eight feet. And in 1768 Charles Clarke, who had sailed as a midshipman with Byron, published an account that said of the Patagonians, "Some of them are certainly nine feet, if they do not exceed it. The commodore, who is very near six feet, could but just reach the top of one of their heads, which he attempted on tiptoe. . . . There was hardly a man there less than eight feet, most of them considerably more; the women, I believe, run from seven and a half to eight." Another account of the voyage, published anonymously in 1767 and credited to one of Byron's officers, was embellished by a striking picture of an English sailor standing beside a gigantic Patagonian couple: the Englishman seems no bigger than a child, barely waist-high next to them, and the huge woman carries a baby of immense size in her arms.

It was British policy then to impound the journals of its explorers and turn them over to professional writers to prepare for publication. Thus in 1773 appeared an account by John Hawkesworth dealing with the voyages of Byron, Carteret, and Wallis, and a later one by Captain James Cook. Here Byron is made to say of one Patagonian, "He was of gigantic nature, and seemed to realize the tales of monsters in human shape. . . . I did not measure him, but if I may judge of his height by the proportion of his stature to my own, it could not be much less than seven feet."

Very tall, yes, but not quite nine to twelve feet, and perhaps not worthy of the descriptive terms Hawkesworth inserted into Byron's journal: "This frightful colossus. .. These enormous goblins." And Hawkesworth's version of Wallis' journal offered a more conservative report. "As I had two measuring rods with me, we went round and measured those that appeared to be tallest among them. One of these was six feet seven inches high, several more were six feet five and six feet is, inches; but the stature of the

greater part of them was from five feet ten to six feet."

The full unraveling of the myth of the Patagonian giants—and that is what it was, of course, a myth-took a little longer, though. A French expedition under Louis de Bougainville made a point of looking for the giants: "We made contact with these so-famous Patagonians and found them to be no taller . . . than other men." There did seem to be a great many who were six feet tall and taller. much bigger than the average European of that era, but these were hardly colossi. Later explorers of the eighteenth and early nineteenth century reported the same thing-tall people, ves, but not really giants.

Byron's own unaltered journal, when eventually published, showed that the statements in Hawkesworth's edited version were rather more vivid than the case merited. Byron had spoken of the Patagonian chief as "one of the most extraordinary men for size I had ever seen," found the average height of the people remarkable, and reported that he "never was more astonished to see such a set of people." But nowhere did he use the word "giant" or "monster," and he made no estimates of their stature. And Charles Darwin, visiting Patagonia in 1834 during his five-year round-theworld voyage of scientific research aboard H.M.S. Beagle, provided the final blow to the old Pigafetta-Sarmiento-Knyvet tale: "We had an interview . . . with the famous so-called gigantic Patagonians, who gave us a cordial reception. Their height appears much greater than it really is, from their large guanaco mantles, their long flowing hair, and general figure: on an average their height is about six feet, with some men taller and only a few shorter; and the women are also tall; altogether they are certainly the tallest race we anywhere saw." Taller than most Europeans, at any rate, but scarcely worthy of inclusion in any Mandevillean book of wonders. Nor has anvone seen giants in Patagonia ever since. In 1879, the explorer Ramon



Lista studied a tribe of two or three thousand people known as the Tehuelches, and found the average height of their men to be six feet two, certainly impressive enough. But the Teheuelches were largely wiped out a year later in an Argentinian military raid following an uprising, and few inhabitants of Patagonia today are above the current human norms of size.

What was it all about, then?

To the voyagers of the sixteenth and seventeenth centuries, when the average height of an adult European male was just over five feet, the Patagonians surely must have looked very large, as, to any child, all adults seem colossal. Then, too, an element of understandable human exageration must have entered these accounts of men who had traveled so far and endured so much, and the natural wish not to be outdone by one's predecessors helped to produce these repeated fantasies of Goliaths ten feet tall or even more. And in Commodore By-

ron's time the British Admiralty may well have had political motives for encouraging the French to focus on fantastic tales of giants instead of examining what these British mariners might really have been up to in the South Seas. So the Patagonian giants appear to have been the product of awe, poor judgment of heights, and, to some extent, deliberate fabrication.

Too bad. I'm looking right now at that 1767 plate of the tiny Englishman standing next to the huge, hulking Patagonian man and woman, and I can't help but feel stirred by the wonder of the scene, the majesty of those two Brobdingnagian figures towering over the astounded mariner. If I, twenty-first-century man living in this scientific age, can yearn for the existence of gigantic beings somewhere on this planet, how much easier it must have been for our ancestors, ever so much more credulous, to accept with delight these tall tales of tall people in the uttermost part of the earth. O

# **SURF**

## Suzanne Palmer

Suzanne Palmer is a writer and artist living in Western Massachusetts. She is a mother of three, who works in IT during the day at UMass, Amherst. Suzanne spends her evenings chasing toddlers and her nights writing, which doesn't leave her much time to sleep. While the author has mostly sold her work to *Interzone* we are fortunate, that her creative use of the wee hours has finally led to an exciting tale of adventure and intrigue in deep space for *Asimov's*.

<I itch >

The translated words were a low growl in Bari's ear. Crouched in the cramped airlock waiting for it to finish cycling, she barely had the elbow room to get her hand up to her headset and tap her suit mic over to her private channel. "Omi, tell Turquoise I'm working. There's nothing I can do for him right now." In another few seconds she would be back inside and not able to talk to him at all anymore.

[I've reminded him,] came Omi's response in its comfortable, artificial cadence.

[He tells me he's going to be quiet now.]

"Thanks," she said. The lock light turned from orange to a sickly green, and she had to go down on one knee to pull herself through the inner hatch into the cabin. Climbing wearily back up to her feet on the far side, she disengaged her suit's environment controls and lifted her faceplate to take in lungfuls of stale warm air that smelled of people too long crammed together in a confined place.

"Oh great, she's back." Vikka looked up from her seat where, as near as Bari could

tell, she hadn't even moved in the hour-plus she'd been gone.

Cardin spun around in his chair. "You took your time," he said. "You're lucky you didn't spook the herd, the way you were zipping around out there." If he noticed the contradiction in those statements—you were too slow, you were too fast—he didn't care. Beside him at the helm, Ceen didn't even bother to turn around. Bari lifted the cumbersome maneuvering rig up over her head and settled it back in its alcove. Its oxygen tanks had only depleted by 20 percent, but she connected it back up to the recharger anyway. Good habits die hard, bad ones kill you.

Cardin put his hands together and flexed them outward, knuckles cracking, before he returned to peck at the patchwork system board he'd set on the console deck in front of him. "I saw activity out there a few moments ago, but I'm not up yet," he said.

"Did anyone get it?"

"She still has the hand-held," Vikka said.

"Ms. Park?" Cardin asked.

"Oh," she said, fumbling for the device her research advisor had spent half a life-

time designing, and checking the tiny display. "There was an 82 percent match with

the pattern we associate with unhappiness.'

"Excellent!" Cardin shook a fist in the air in a gesture of triumph. "No one has ever come this close to understanding Rooan communication before. With my system, and the extended, close-up sampling we'll be taking today, we are making history!" A royal "we," Bari thought. His ambitions were transparent: King of his little corner of Haudernellian Academia. By his expression she could tell he was imagining the future speaking engagements, celebrity symposiums, and awards ceremonies that would be his natural due.

She knew she was only here because he needed someone expendable to do the spaceside work while he and his precious postdocs huddled around their tiny, blurred monitors congratulating themselves for their own manifest cleverness and superiority, safe and snug within the run-down, decommissioned Corallan shuttle that Cardin had dubbed *Project One*, but which, after his attempt to camouflage the exterior, would forever be the Space Turd in her mind.

The Sfazili independent who'd hauled them out here into the barrens had taken one look at their craft and declared as much himself; alas, neither Cardin nor anyone else on his team understood the tradesman's arrot, so her amusement had been a

private one.

"Okay, people," Cardin said. "We need to run calibration tests. Ms. Park, you arrayed our external sensors according to my exact specifications?"

"Yes, sir."

"You double-checked?"

"Twice," she said. Vikka rolled her eyes.

"So far we've been lucky and they haven't noticed we're here despite Ms. Park's thrashing about out there. Ceen has gotten us into position along the outer edge of the herd, and we'll maneuver our way a little further in as opportunity presents. As you know, the Rooan travel with their bioluminescent shell-walls all turned toward the center axis of the herd, so the further in we get, the more inter-animal communication we should capture. The herd is currently moving about point-oh-oh-oh-two Cee, so we've got about six and a half hours before they brush the edge of Auroran territory. We want to be well away by then with as much data as we can collect.

"Ms. Park, give Vikka the handheld unit," he ordered. "Then go find yourself a

place to sit in the back and stay out of our way."

Vikka got up from her seat and sauntered over. As Bari extended the unit to her, Vikka leaned in closer. "Right before we launched I told Cardin that you were sleeping with Morus and giving away information about the project," she confided in a low voice. "He was so furious at you that I thought he was going to bust something. Oh, I know! A lie, but what can I say? I just don't like you Northies." Smiling, she yanked the handheld out of Bari's grasp and returned to her seat without a further look back.

Bari finished stowing her gear, her face burning. Morus was not only the top xenobiologist at rival Guratahan Sfazil Equatorial University, he was also studying the Rooan. The rival scientists hated each other with a white-hot passion that neared homicidal rage. It explained why Cardin had become more actively hostile in the last few days. She was lucky he hadn't had time to replace her—if Vikka had gotten her kicked off the project out of sheer spite...

Don't think about it, she told herself. I'm here. Gear properly stowed, she folded down the jumpseat near the airlock and buckled down her safety tether. And she

waited.

From where she sat in the back, her view out the front was mostly obscured, but the light from Beserai's sun shining on the black, rough backs of the Rooan made

Surf

faint arcs of silhouette among the stars ahead. She counted a half dozen, though the herd strength was closer to thirty times that number; the very few, vulnerable young were tucked in the center, away from prying eyes. Not even Cardin, in all his arrogance, would risk trying to penetrate into the core of the herd.

As if reading her thoughts, Cardin spoke up. "We need to stay far enough on the periphery so that they don't take too close a look at us. The Rooan are normally placid animals, but with the toll those pirates and thugs have been taking on the herd's numbers, they'll get more skittish the closer we get to Auroran space."

[Doesn't everyone already know this? Why speak if not to say something useful,

unless it's just to hear his own voice?]

Bari allowed herself a small tic of a smile at Omi's comment. Not that Cardin was wrong; the remote station and surrounding outposts that made up Aurora Enclave had earned their reputation for vicious and capricious violence. The Barrens had many such lawless enclaves, but Aurora was the biggest and meanest of all. Even Earth Alliance, if need drew them into the territories at all, skirted well around it. The Rooan could not. The herd's migration loop between Beserai and Beenjai was dictated by gravity wells and the shortest of few, long paths between scarce resources. Along the way, the massive dwellers of the void inevitably attracted scientists, a handful of sightseers, and bored Auroran fighters looking for cheap and easy target practice.

Bari looked up as flashes of light caught her eye; one of the Rooan directly ahead was displaying a shifting pattern of bioluminescent greens and yellows, coruscating up and down the creature's underside. An answering flash of red came from further

ahead.

"Shush!" Cardin yelled, though no one was speaking, and even if they were, they could not drown out light with sound. He leaned in close, his whole frame tense. "Why isn't the translator working?"

"It's processing," Vikka said, squinting at the handheld. "Um . . . the first one, it's giving me 'food near' at 40 percent, and the response, um, 'happiness' at 75 percent

correlation."

"We're nowhere near a nutrient source. Give me that," Cardin said, and yanked the unit out of her hand. He stared at it, shook it, stared at it some more. "Food near,"

he repeated, scowling.

"Could it be a statement of a more general anticipation?" Bari spoke up from the back. From the look Vikka shot her, it was an unwelcome interruption. Cardin's gray eyebrows knit together, then he made a slight tsk sound. "A surprisingly good suggestion," he said, turning to look one at a time at both Ceen and Vikka as if to reprimand them for not having been the ones to voice it. "Although the common understanding is that the Rooan aren't sufficiently intelligent for such an indirect concept."

Vikka had just started to flash a sneer at Bari when he added, "Of course, common understanding is often wrong. If I can prove the Rooan have a rudimentary grasp of

abstract thinking, that would be an enormous coup."

"And if you could prove Northies have a rudimentary grasp-"

"Bigotry doesn't become you, Vikka." Cardin cut her off. "Nor jealousy. You're the professional—act like one."

[Ha! Face stomp!] came over Bari's link. [Turquoise asks how much longer you expect to be. I know you can't answer, so I told him you take your job very seriously and he'll just have to wait.]

She did take it seriously—seriously enough to have hiked thirty-seven miles of barren no-man's-land to the isthmus border between North and South nations on Haudernelle, everything she owned on her back and a verichip with a personal recommendation from the Northern Institute's Director of Xenobiologic Field Studies

tucked in a pocket against her breast like a ticket home. Even that had only been enough to get her five minutes of Cardin's time. If she hadn't had the experience with zero-grav and the full set of untethered spacewalk certifications, that would have been as far as she'd gotten. He'd told her as much when she signed on, and told her if she didn't appreciate that he'd given her a job at all she could "go back to the woods and scratch in the dirt for food like the rest of your people," or something like that; the exact words had fastened less in her memory than the tone of them.

As it turned out, she'd displaced another of Cardin's students who didn't have the certs, and Vikka had been trying to drive her out ever since. Bari suspected that

they'd been lovers, but didn't care enough to find out.

Cardin stood up. "On the off chance that Ms. Park is on to something, I should be able to get the system to give us a double translation simultaneously, one of explicit meaning, and one of running extrapolation. But I need to access the primary console

to make programming changes. Ceen, keep us steady relative to the herd."

The professor threw the floor hatch and disappeared down into the tiny hold where the mishmash of tech he'd spent decades putting together nestled like a canker in the ship's belly. As soon as the hatch closed behind him, Vikka whirled on Bari. "You fucking bitch," she said. "Are you trying to make me look stupid? Haven't I warned you to keep your damn Northie mouth shut?"

"You have," Bari said. She checked her tether, got out of her seat, then popped open

her locker and began sorting out her personal gear.

Ahead of them the gigantic shapes of the Rooan flashed light back and forth, yellows and blues, reds and purples, a lone beacon of blue. "Will you two shut up?" Ceen snarled. "It's bad enough trying to fly this piece of shit as it is, and Cardin will kill us all if we miss anything important out there or spook the herd."

Ah, my jacket, Bari thought, unfolding the garment and shaking it out.

"Oh, very nice," Vikka said, reaching a new high pitch. "Did your mommy sew that for you back home? What do you Northies call home, anyway? Palm-fern huts in the

woods? Dirt burrows?"

Bari slipped into the jacket. She flexed her arms, shrugged her shoulders, pleased again that even after all these years the fit didn't impair her physical movement. The jacket was comfortable, almost too much so. She walked forward toward Vikka, the weight of her mag boots on the metal decking and the faint tension of her safety tether a reassurance. "Would you like to see?"

"Why the hell would I want to be anywhere near anything of yours?" Vikka said, as Bari extended one hand, palm up, to show off the workmanship of the embroidered sleeve. As the woman opened her mouth to say more, Bari reached around with her

other hand and slammed Vikka's head into the console in front of her.

"What the fuck!?" Ceen shouted, half-rising out of his seat, as Bari reached over and punched the emergency off for the ship's gravity field. Untethered, Ceen's motion propelled him into the back of his seat and into a bulkhead. He managed to get a grip on the seat foam and was trying to swing himself within reach of the end of his free tether when Bari kicked him just hard enough to send him careening around the cabin. Then she bent down and snapped tight the lock on the hatch Cardin had just gone through.

Vikka was struggling up in her seat, one side of her face a brutal red and already beginning to swell, her eyes tearing up with hatred. Bari put a hand on the back of her neck and forced her face back down against the console. "Vikka," she said. "Please understand. First of all, you make yourself look stupid all on your own. Second, my mother is dead, so I'm not really inclined to listen to you talk about her. Third, while I came to Haudernelle Academy from the North, I wasn't born there. Still, during my time in the North, nearly everyone I met was intelligent, hard-work-

ing, and generous, entirely unlike you. It's something you might consider if you find yourself face to face with a real 'Northie.'"

"I am so going to kick your ass," Vikka hissed. "Cardin will--"

"Cardin can't do anything, and neither can you." Bari took the small dermal patch she'd palmed while sorting through her stuff and slapped it—harder than necessary, she had to admit—onto Vikka's forehead. Almost immediately the woman's eyes rolled up into the back of her head and she went limp. "Nighty night."

"Are you mad?" Ceen shouted from where he drifted mid-cabin. "You're jeopardiz-

ing the entire project!"

At least he cares about the science, if nothing else, Bari thought. She peeled the backing off another patch. He watched her do it, flailing his arms hopelessly trying to reach something to grab onto. "If it's any consolation, Ceen, the project was already failing," she said. The herd is going to turn early toward Aurora space, coming dangerously close to their outpost in this sector. You'd only have had another thirty minutes, possibly less, to try to accumulate the material needed to demonstrate the validity of Cardin's translation program. We both know that's not nearly enough time. And after this, the herd is going to slingshot off Beserai and head back into deep space for the centuries-long trip to Beenjai. They'll go dormant and silent, leaving you with nothing left to study."

"How can you know this?"

Bari sighed. The Rooan use gravity wells to modulate their velocity, right? If you simply look at the alignment of the planets in this system and their current heading, their trajectory is obvious—and gives them no more options in-system. This has to be the last pass."

Ceen was silent a moment. "I suggested that to Cardin six months ago and he said

I was wrong. He said I was an idiot.

"Well, when you get out of here, be sure to remind him."

"Am I going to get out of here?" he asked.

"You might," she said, and slapped the patch on his arm.

"What is it you want?" he asked, his voice already fading as the sedative grabbed a

hold on him. He was out before she could answer, but she did anyway.

"To sleep at night," she said. Pulling him across the cabin by one arm like a strange balloon, she stuffed him into the chair beside Vikka. She buckled them both in and down, pulling the straps tight to keep the two of them in place.

There was banging on the floor hatch, muffled and indistinct. She ignored it for

the moment, and tapped open her mic. "Okay, Omi, the ship is mine," she said.

[Right on time. I'll let Turquoise know.]

Bari slipped into the seat Čeen had vacated so abruptly, swapping tethers once she was fully seated and strapped in. Pulling open one of the access panels on the helm console, a small blade took care of long-range communications. Then she reached over and turned off all of Cardin's external sensors. Sorry, Professor, but I don't need any recordings of this.

"I'm taking the ship further into the herd," she said.

[Turquoise says you're clear, and the front of the herd appears to have begun to

The intercom on the helm began blinking. She pressed a button, and a moment later Cardin's voice rang out tinnily in the main cabin. "What the hell is going on up there. Ceen?"

"I'm sorry, but Ceen is unavailable."

"Ms. Park. Put Vikka on."

"Vikka is also unavailable."
"Did we have an accident? A malfunction?"

"No accident," she replied, as she logged into the helm console with Vikka's password and changed all the passcodes. "Ship systems are all green." "We've lost gravity and the hatch above me is stuck fast. What do you call that?"

"I call that one small switch and a medium-sized lock, Dr. Cardin.

The pause was longer this time, "Ms. Park, explain, Now,"

"I decline," she said. "If I were you, I'd get a hold of something shortly, because I'm about to start shutting systems down and I assure you, sharp things multiply in the dark."

"Morus put you up to this. How much did he pay you to infiltrate my team and

sabotage my project?"

"A poor guess. I've never even met Professor Morus," she said. "Please rest assured that my real client has no interest in the success or failure of your project; you are merely a convenience."

"What is it you want?"

Everyone keeps asking me that, Bari thought with some annoyance. For Cardin, she had a more practical and immediate answer. "I want your ship." And then, because she didn't really want to talk to him again, she turned the intercom speaker back off.

[You're just about in position.] Omi said over her private link. [Turquoise is going to help spot for you, so I'm patching him back in. A fair warning: he's still complaining about being itchy.]

<It does itch!>

"I'm certain it must, but it's not for very much longer," Bari replied, trusting Omi to translate. "How am I looking?"

<Do you see the big female ahead? Pull up beside her.>

Bari leaned forward and peered out the window. She'd closed the distance between her and the herd, and again she was struck by how singularly massive all the Rooan were. And how much, if they'd been green instead of gray-black, and hadn't had shifting fluorescent colors along their underbellies, they'd look like gigantic space pickles. "How do I tell which ones are female?" she asked. Or "big"?

There was a pause, then Omi answered instead of Turquoise, II'm not translating

that.l

Banging started up again on the hatch, easily ignored, Bari picked one of the several looming shapes in front of the ship and sidled up between it and another. "Is this good enough?" she asked.

<It will do.>

[The herd is on a straight trajectory now, and will cross into Auroran territory shortly.] Omi said. [You should lower the ship's energy output to avoid detection.]

"On it," she said, and she already was, shutting down all non-essential systems and the Turd's primary engines. Unless something went terribly wrong, she wouldn't need anything more than minimal thrusters to keep her position amidst the Rooan. Just before hitting the lights, she glanced around the cabin and spotted a small silver ball hovering, idle, near the ceiling at the back of the ship. She snapped her fingers. "Bob," she called. The bob lit up, glided near. "Light," she ordered. "Thirty lumens."

The bob switched on, casting a light bright enough for Bari to make out the controls but not much brighter. She turned off all ship interior and exterior running lights. There was a brief flurry of sound from the hatch that sounded faintly like

someone scrabbling for purchase, then nothing. I did warn him.

With the faint light from the bob sufficient for what she needed, she killed all remaining main and auxiliary power feeds to the ship. A faint hum she'd long ago stopped hearing became noticeable by its sudden absence, and reflexively she took a deep breath. Ceen and Vikka, unconscious, breathed shallow and slow, and she resented only one of them what air they used. Cardin's supply was his own. Bari would use only a little herself, and if they didn't all die at Auroran hands she'd have plenty of time to turn the air generators back on before anyone felt any ill effects.

Leaving the helm controls on auto, she stripped out of her coveralls and pulled on the suit that she'd taken from her locker, a tight-fitting, matte-black, alien-made biosuit much less cumbersome than the Turd's, and worth far more than all Cardin's grants and endowments combined. She slipped her jacket back on over that and buttoned it up. The jacket was fine black linen, a double-row of magnetic buttons up the front placket, and a small semi-circular starburst of silver thread embroidered where mandarin collar met left shoulder, where sleeve met arm. She ran her fingers lightly over the old thread and thought of long-forgotten things.

[I'm picking up incoming from the outpost. Four ships, probably showing up for some more target practice on the Rooan. They don't appear to be in a hurry, but

they're definitely coming here.]

"Got it," she said, pulling her suit hood up over her short-cropped hair and sealing the face-plate. Next she put on a vest, quickly checking each pocket to make sure it was still sealed and its contents secure. Ignoring Cardin's maneuvering rig, she pulled a much lighter-weight, thin-profile pack out of her locker and slipped it over her shoulders, fastening straps across her chest, abdomen, and crotch. A small plug connected it into the suit. Then she took out the last item she'd need, sliding it into the narrow sheath just over her shoulder.

She flexed the muscles in her hand in sequence, powering on the suit's systems.

"Can you hear me?" she asked.

[Loud and clear,] Omi answered.

<Are you coming out to play?> Turquoise added.

"I am," Bari said, and she cycled herself out the airlock into space.

As part of its camouflage, the outside of the Space Turd had been given a rough, uneven surface. It had made adding covert handholds to it trivially easy, and Bari used these to move up and on top of the ship. Around her the Rooan shifted ever so slightly, giving her an unnerving vertigo. She wondered where among them her friends were hiding—nowhere easy to find. certainly.

No one who had not been explicitly invited there came intentionally within reach of Aurora. This inactivity made the pilots who flew along the border outposts bored, and bored pilots found any entertainment they could. On their last two passes a third of the Rooan herd had been lost; much more and they wouldn't have the num-

bers they needed to survive.

The gigantic animals must have become aware of the approaching ships, because the flashing on their undersides became more intense. [The ships are on direct approach,] Omi said. [They should be in range in three point six minutes. The herd is getting nervous.]

At the apex of the ship, perched on the nose, she unclipped the large energy-cannon she'd tucked there just before the *Turd* left Glaszerstrom Station to intercept

the Rooan. "I need a window," she said.

[Working on it. These things are hard to nudge.]

The Rooan to Bari's left began drifting upward, and Bari could make out four small pinpoints of light moving toward them. In the distance was the faint blue glow of Outpost One. Deep in space behind that was the heart of Aurora itself, with its implacable, invincible warlord, who took everything he could see, and owned everything he could touch. She gritted her teeth, raised the cannon, and took aim at the closest of the incoming ships.

The first one will be the easiest, she told herself, and fired. The pinpoint of light flared for an instant and went out, as immediately the other three veered away. Now

the hunt would begin; they'd be scanning the area, but the *Turd*, powered almost fully down, would be virtually invisible. Her Dzenni suit, far more sophisticated than anything found in human space, was a total insulator: she would not radiate heat, she would not absorb it. She would not be easy to find.

One of the remaining ships moved nearer, slowly edging up on the herd as if scanning for something on the far side of it. She checked the cannon's heat load—still

only 12 percent, still cool enough-and then shouldered it again.

The second ship flashed and disintegrated.

"I don't see the other ships. Omi?"

[One is circling around the Rooan. I don't see the other.]

All of a sudden, around them, the Rooan began to shift and scatter, their light-patterns now oscillating wildly. 4 believe he's trying to use the herd for cover while he looks for the source of the fire.> Turquoise said.

"That works for me," Bari said. She turned around, then threw herself backward in a panic, flat onto the surface of the ship as a Rooan barreled overhead, nearly knocking her off the ship. Big mistake, Bari, she told herself. No matter how big they are,

they aren't going to make any sound when they move. Pay more attention.

The passage of the creature had left a small gap, and she could just see the edges of the third ship behind them. She got the cannon up, took the shot, and missed. Swearing, she checked the heat load again—a little over 40 percent now, starting to get warm. The ship banked, disappeared behind a cluster of Rooan, and briefly reappeared farther up than she had expected. Ship's moving in an evasive pattern. "Can you see him?" she asked.

[No . . . ves. He's banked low again, circling around.]

"Thanks," Bari said. She lined up the sights on a gap ahead, and smiled when the ship appeared. Another flash, and then there was just one.

Don't run home yet, she thought at it, I need you.

She ejected the power cartridge from the cannon and let go of both pieces, where they drifted along with the herd. The cartridge would cool off quickly in open space. Unencumbered, she looked around the herd to get a sense of their positions, stood up straight, and launched herself up and forward toward the bright yellow-orange underside of the ancient Rooan who had nearly knocked her down moments ago. A quick squeeze of one hand sent enough thrust from her pack to carry her forward, and she reached the big creature and got a grip on its craggy, pitted underside, oscillating from yellow to orange and back again under her gloves. Two more jumps brought her forward.

"Where's my last fighter, Omi?"

[I still can't see it. Turquoise?]

<It's directly ahead. The herd is moving around it. You've almost caught up to the state of t

If only Cardin knew how thoroughly his Rooan-camouflage would be tested, she thought. The problem was, Cardin had only designed it to stand up to the scrutiny of dumb animals; as aggressive as Aurora's fighters were. "dumb" they were not.

She moved hand over hand along the side of her Rooan until she was up near the pointed front, then flipped her faceshield to infrared. Even then the enemy fighter wasn't immediately obvious. It was only as one of the Rooan directly ahead of her swung slightly out of line to avoid something that she spotted it. He's playing the same trick I am, shedding his heat load to avoid detection while looking for his enemy. If she wasn't wearing her Dzenni suit, she was sure she'd be lit up like a nova on his screens.

She had maybe a minute before he was close enough to the *Turd* to spot it for the fake it was. She smiled and reached into her pack. *Not a problem*.

As her Rooan ride neared the ship, she kicked off and tumbled, silently, across the intervening space as the Auroran unwittingly headed toward a rendezvous. Her timing was perfect; she reached out one hand and touched the side of the ship just aft of the pilot's view, a silhouette in faint light just visible inside. With her other hand she slapped an EMP mine onto the hull. Then she pushed off again, breaking physical contact with the fighter as the mine flashed once, twice, and the ship went truly dead.

The herd continued to move around her, the Turd slipping silently past along with them. She squeezed her fist and moved forward to where she could grab onto the dead fighter again. Taking the second mine out of her pack, she placed it next to the first. This one she didn't back away from, and she could feel the thrum even through

the multilayered hull as the pressure-wave grenade activated.

The airlock had to be operated manually of course.

The pilot was floating unconscious near the inside door, an energy pistol dangling from one hand. He'd known someone was coming for him the moment the EMP mine went off. Her mag boots kept her upright as she cycled the lock closed behind her and took his gun. Slipping off his helmet-damn, he's young-she peeled back the collar of his uniform with its own, less intricate starburst embroidery and slapped a sleep patch on him as well. Then she dragged him to the back, found the single-occupant escape pod, stuffed him in, and melted the lock.

Climbing into the pilot's seat, she buckled herself down and rebooted the systems. As the helm tried to bring itself back to life, she tapped her suit mic, "I'm in," she

said. "How far behind am I?"

[You've almost dropped out behind the herd,] Omi replied. [I see three more ships

on intercept from the outpost on max burn, about six minutes out.] The helm was flashing a long, thin red line. Bari slipped on the pilot's helmet, then carefully ran her left forearm over the bar. For a long second she was afraid it wouldn't work, that the chip under her skin was too old or obsolete, but the bar flashed green at last even as the rest of the console came back online.

"The ship's mine. Light up the decoy can," she said.

[Done,] he replied, just as a faint flare appeared on the screen of her own console, on the far side of the herd. From a distance, it would not be distinguishable from an

imperfectly-dampened engine signature. Close up, it wouldn't matter.

Four ships down, counting this one, she thought, and three more on the way. Outpost One had, by her best estimates, twenty-six combat ships at the moment—a recent border skirmish with Glaszerstrom had cost them three others. The remaining pilots would be off-shift, but were probably now being roused and told to stand by. And at least half of those would be too drunk to fly. Or so she hoped. It was the largest of Aurora's outposts, a cornerstone of its defense.

She plugged a line from her headset directly into the ship's comm net. "Can you

[The signal is weak from here and it's heavily encrypted.]

"So that's a 'no'?"

[No, that's a "give me a minute or two."]

<The herd is nervous.> Turquoise added.

"As long as they don't scatter, we're okay." Bari had engaged the craft's engines on minimum thrust and moved further into the herd, the ever-shifting rainbow of a Rooan's belly above her like the landing lights of an insane, upside-down, psychedelic runway. Cardin's translating machine would have choked on this much incoming data. She was surprised to realize she felt a tiny pang of guilt for having so thoroughly derailed his project. If the man hadn't been such a puckered-up old assvalve, she might have considered leaving a few of his data-collectors on.

[Got it. You want a live feed?]

"Absolutely."

... an ambush? See it now, on the far side of the stupid squids.... Can't believe anyone got the drop on Mejef and Beck. Kirbenz, though ... Is that Tonker, hiding in the middle? Tonker, is that you?

"Modulate my voice to middle-young adult human male, Auroran accent, add 10

percent static when you encrypt," she said.

[Ready.]

"Shut up, you idiots! Maintain silence," she said, and heard it go over the comm network after a moment's delay passing through Omi. It didn't sound like her at all. Good.

The three incoming ships fell silent, and pulled more tightly together as they came in. They're going for point-to-point, she realized. Direct light-based comms wouldn't be able to be intercepted by any normal tech. It also meant they wouldn't bother to encrypt it.

Luckily for me, I have some abnormal tech indeed, she thought.

<They are discussing the best approach, through or around the herd, and whether to stay in formation or come from multiple directions, Turquoise provided.</p>

That meant they most likely believed her to be Tonker, among other things. "I'm going to need an exit."

[Passing it on.]

They've split their approach,> Turquoise said. <I'm working on nudging the herd a little so you can come out behind one and above a second. The third will pass in front of the herd, so you will have to find your own strategy for that one.

"Got it. Thanks," Bari said. She watched as the Auroran fighters split just as predicted, and moments later saw a small shift in the herd nearby: Turquoise's handi-

work. "I'm glad I brought you along."

[He's laughing,] Omi said.

She edged her stolen craft toward the growing gap, and emerged just after one of the three Aurorans passed. A quick check showed another moving along the underside of the herd where it had cover from the decoy, but in her own clear sights.

Do it, she told herself, and powered up the weapons systems. She fell in behind the first fighter, and then, carefully sighting on it—she wouldn't get any extra chances

here-fired. The ship flared and died.

She sighted on the fighter below, which was just beginning an evasive maneuver away from her, and took it down too.

"Tonker! What the fuck?!" This from the remaining ship.

"Omi, jam him!"

[Doing what I can.]

She banked up and around, resisting the urge to use the Rooan as shielding. The fighter broke off and fled. They raced away from the herd, Bari on his tail as he wove a pattern through space, staying always one tic and jump just out of her sights. 'Oh, Hell," she swore. Her hands flew over the console, overriding the safeties and dumping energy from life support, gravity-gen, and radiation shielding into the engines. She was suddenly light in her seat, held in place only by inertia, seat straps, and her safety tether. The burst of extra speed was less than she'd expected, but she began to close.

[Bari . . . ]

"I know," she said. She could already feel it, the cabin growing colder. She closed her eyes for a second, let long practice at mind-body control kick in, and slowed her heart rate and her breathing. Then she opened calm eyes on the enemy, closer now, and brought him down with a fast double-hit. She hadn't even reached the debris halo before she was already diverting the ship's systems back to normal.

[That was dangerous.]

"So would be letting him get away."

Outpost One lay dead ahead. It sat in space like some giant's toy, the sunlight of Beserai's distant star gleaming off it only adding to the impression of a scaled-up, metal wasp's nest. Around it floated smaller objects: waste processors, chemical weapons storage, trash. As she watched, four more ships appeared, heading her way at full burn.

She got out of her seat, careful to keep the safety tether clipped, and pulled another small device out of her pack. It took her a long minute to wire it into the console, while the ship closed the distance to the outpost's remaining defenders. "Omi, did you get a good look at that last fighter's evasion patterns?"

[I did.]

"Then I'm putting you in charge of the helm," she said, clicking the device on. "You should have remote now."

A pause. [Got it. Any change in plans?]

"No, we're going in the hard way. Get as close as you can. If you can, blow the escape pod just before they take us out."

Bari pulled her face shield back down, checked her suit seals by reflexive gesture, then disengaged the safety tether and cycled herself back out the airlock. Pulling herself along the ship's hull, she reached one of the purely aesthetic wings and clambered out until she was perched comfortably about halfway down its length. Here, she was well out of the way of the furiously burning engines slung on the underside. She traced her fingers along the thin ribbon of silver laid into the black wing, the very familiar starburst pattern, and let an old anticipation, and a newfound guilt, wash over her.

<The herd front is nearing closest proximity to the outpost.>

"You should be safe. I think Aurora is going to be too busy dealing with me to think about anything else for a while." At the moment, the stolen fighter beneath her feet was heading straight for the outpost. "Omi, course change in five," she said. "Four,

three, two, one . . .

She let go of the ship even as it banked away underneath her, now on a collision course for the chemical weapons bunker. In her suit she was invisible to the intercepting ships; by eye they might spot her, but now they all changed course as well, pursuing the visible threat. She put her arms out from her sides in a parody of a swan dive as she fell/flew toward the outpost. Sailing through space in nothing but the Dzenni suit gave her a sense of being both infinitely powerful and infinitely insignificant at the same time. Which is exactly as it should be, her teachers would have told her.

Far away from her now, the Auroran fighters drew close enough to her stolen ship to obliterate it; she caught the small flash of the escape pod ejecting, but the fighters closed in on that, too, and turned it into just so much more space debris. "Sorry,

Tonker," she murmured.

From there the fighters spread out, cautiously edging forward away from the base and each other, looking for the next threat. She was already well inside their slowly expanding perimeter, the outpost looming large dead ahead. She smiled, she was on

target, no need to risk a burst from her pack to change course.

She curled herself up and around until she was foot first, trying not to think about how long she'd had to practice the maneuver to keep from sending herself into a hopeless spin, and hit the side of the station near the pinnacle well above the central mass. It was a hard landing, but she'd prepared for that as well, and turned it into a short tumble up the sloped surface before she managed to catch a grip and stop. Then she activated the light mag fields in her boots, stood up in what felt, even ab-

sent any meaningful input from her inner ear, like a cartoonishly horizontal direction, and ran down and across the surface of the station.

The maintenance hatch was exactly where she expected it to be.

Bari spun the outer wheel, pulled the hatch open, and tucked herself into the small crawlspace backward so she could close it again. Once the hatch was sealed, she tried to turn around and discovered that, with the pack on her back, she couldn't. "Oh, great," she muttered.

[Everything okay?]

"It's just smaller than I expected."

[Or you're bigger than it expected.]

"Thanks," she said, then under her breath, "you bit-fried hunk of space flotsam."

[I heard that.]

She scooted backward through the tight space until she came up hard against the inner lock. Now what? she thought. As best as she could, she laid down flat, her pack an uncomfortable wedge under her back, and studied the upside-down lock controls. Then she pried open the security panel, pulled out two leads, and shorted them. The hatch slid open with a whoosh as air filled the small crawlspace, and she scrambled out and into the maintenance space on the far side.

This area was only marginally bigger, but it was enough that she could turn around and, squatting, pull herself upright. Also, it had atmosphere. Her suit's supply was down to 52 percent so she set it to recharge automatically from the sur-

rounding air.

It took her a minute to get her bearings, and then she moved through the tunnels as quickly as a need for quiet could afford. Several turns and intersections later, she found herself at another small hatch, with what appeared to be a small butter knife wedged into the control panel. She touched it gingerly, as if it could shock, but it was inert, a dead relic of another's past.

At least I know I'm in the right place, she thought, "I'm going in."

She emerged into a cramped and dusty storeroom filled with boxes, crates, and stacks of miscellaneous junk, the lighting dim. She took several deep, calming breaths as she unloaded from her vest pockets the next set of items she'd anticipated needing. As soon as she felt back under control she reached out an arm and slipped it past the chip reader. The doorlight turned green and admitted her into the main corridors of Aurora's Outrost One.

The senior staff would be in the situation room, monitoring the fighters as they looked for signs of their nemy, while security spread out throughout the decks, watching the airlocks and the docking rings, watching their own population for any sign of internal insurrection. The Auroran warlord would be doing much the same from his seat back in the central enclave, watching everyone, trusting no one. Out of

Bari's grasp, but not beyond her touch.

A stunner took out the door guard. She shorted out the lock into the situation room the same way she had the hatch's internal airlock, and stepped inside. The room was dark, wood-paneled at ridiculous expense, displays overheard showing the

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still-expanding search party in vivid red tracery. Heads turned, hands reached for weapons, but before anyone could draw she was at the chair of the outpost's commander, her gloved hand lightly laid under his chin, across his neck, above the silver embroidery of a jacket nearly the same as her own. There were three other men in the room, all frozen where they stood, assessing, waiting.

"Who are you?" the commander barked.

"You don't remember me, Karilene?" she said.

He stared at her face, then at the jacket she wore. "I don't know you."

She hesitated, then reached up and peeled off the biomask she'd worn for nearly half a year, nearly coming to accept that face, the face of "Ms. Park," as her own.

The commander stared, and his gaze lost none of its sharpness, but after a moment the single "Ah" that passed his lips was like the last, faint breath from a dying man. He straightened, his arms folded carefully, fingers entwined, on the console board in front of him. "Bariele. You've grown into that jacket at long last, I see. You've come for revenge." It was statement, not question.

"No," she said. "Business."

"You're an assassin, then?"

"A facilitator. In this case, the difference is minor."

"Who sent you? Not Glaszerstrom, surely?"

"No, not them."

"Then who?"

"You were in someone's way, and presented them with a difficulty they wanted reolved."

He laughed. "My brother and I built Aurora out here in the Sfazili Barrens so that we would not be in anyone's way, and no one would be in ours. You know that."

And yet

"The ambush was cleverly done. I hope you got a good price."

"I die

"He'll rebuild Outpost One, even if it takes years and years. It's not like him to let anything go. And he'll hunt you across the entire Multiworlds if he has to."

"And I expect he'll find me, sooner and closer than that."

As if sensing that something was about to happen, the others in the room began to shift and move, but before anyone could act she'd grabbed the short handle protruding from her pack, drawn out the thin, sharp blade that lived there, and moved it down in one swift, graceful motion. The old man jerked twice in his seat and then was still.

A young man toward the back of the room let out a cry, fumbling for his pistol, and abandoning her blade where it was she drew a small, cruel knife from the sleeve of her suit and skewered him through the neck from across the room. 'Anyone else?' she asked, unholstering at last her own pistol. The remaining men stared at her angrily but relinquished their weapons. 'Neither of you are half the man Karilene was. If you want to live, leave this room now and get off this station.'

She stood, blade in one hand, pistol in the other, as the two men walked carefully around her and out. "When you report what happened here," she told the second man, "be sure to tell my father I send my regards." Then she closed and sealed the door.

Removing her jacket, she laid it over the old man's body like a shroud, or a calling card, or perhaps both. Where she was going she could not take it, and she knew and he would know—that she left it only because she'd be back for it.

"It's done," she said into her suit mic.

[The fighters have turned and are heading back to the outpost at top burn, and there's activity at the Enclave itself,] Omi said. [Not to rush you, but you need to get out of there.]

"I'm on it." She sat at Karilene's console and slid in the small chip. Immediately sys-

tems began shutting down and scrapping themselves as the Outpost's general evacuation alarm sounded. She positioned her last three EMP mines beside the console and set the failsafe to detonate if they were interfered with. In a short while, the entire base would be defenseless, uninhabitable, scrap. It would be abandoned until it could be secured and rebuilt, which wouldn't happen until Aurora's warlord had made some determination of who had sent her. And that was something he would never resolve.

The same paranoia that would keep him away from this border until he understood what had happened here was now her own way out. She went to one wooden panel, felt around the trim until her fingers found the tiny catch, and the panel swung open. From there, metal rungs set into the narrow tube led her up and into the very top of the station where a small ship lay cocooned as insurance against the worst.

The escape craft had dust on the console but was fully charged, waiting. She left the outpost in a roar of speed only seconds ahead of the EMP explosion that crippled

Setting the tiny ship on a wide arching course for the far side of Beserai, she engaged the auto-pilot. By the time the Auroran pursuers caught up and blasted the ship to pieces she'd long since abandoned it as well, floating curled in a ball in space, invisible.

Finally, far behind and away from the furious activity, the Rooan herd caught up to

her, enveloped her, carried her along.

The Space Turd felt cramped and foreign when she climbed back into it. Cardin was still banging on the hatch at random intervals with little enthusiasm. After checking on the soundly asleep Ceen and Vikka-utterly ambivalent now to themshe sat herself down at the helm, slid the life support controls back up to full, and turned back on the gravity generators. She slowed the ship and changed its course; in a few seconds it would begin to fall behind and away from the herd. Last, she reactivated Cardin's intercom and sensors, a gesture she could only think of as recompense for the use and misuse of his ship. And because it didn't matter anymore,

She flipped the hatch bolt with one foot, toed it open; it was still dark in the cabin, dark enough to hide her, but she could see the professor's face in the dim light of his

computer, the lines of fear etched in it rendering him a stranger.

"Ms. Park?"

"Your handheld," she said, and dropped the unit down to him. "Ceen should wake up and let you out in a few hours, and then you can go home. In the meantime, collect what data you can."

"But ... Aurora ..."

"You don't need to worry about Aurora, Professor," And she closed and locked the hatch again.

She peeled off Ceen's patch, throwing it in the ship's flash-recycler. Vikka she left as she was; it was up to Ceen to decide if he wanted to listen to her the entire trip back or leave her asleep.

Her suit was fully re-charged. Time to leave the Turd, pick up Omi, and collect payment. She left the airlock one last time; the Turd was still on auto-pilot, but would soon diverge from the herd as the Rooan changed trajectories again for the slingshot pass around Beserai. Her pickup rendezvous was arranged for the far side.

She moved through the herd, jumping from one giant, rough body to another as if she was a stone skipping across a lake, until she found one with a small silver sphere taped to the underside, just under the nose.

<I still itch.> Turquoise said.

"Yeah, yeah, Omi, tell him to hang on."

She peeled off the tape, held the sphere up beside her, and let it go in space. Its single blue lens blinked at her.

[About time.]

Large rippling shades of blue moved up and down the body of the Rooan. [The big guy is happy, too.]

The Rooan flashed another sequence of blue. "I didn't catch that," Bari said.

[Oh, sorry, I was looking the wrong way,] Omi said. The sphere turned, flashed a sequence of lights at the Rooan, who flashed back.

<Thank you.> Turquoise said through Omi's translator. <The herd has given you Rooan names, in thanks for your assistance. Bari, it will honor us to be allowed to call you ####. Omicron, if #### does not suit you, I don't know what will.>

"Uh . . . I didn't catch that."

[Light-based names. If it helps, you're 23-17-83RGB Fading Reverse whereas I am 61-40-240RGB Brightening Center.]

"I'm honored," Bari said, hoping she was.

<Your price. We near Beserai. You wish to surf with us?>

"Oh, I do."

<It is, we would expect, lethal for non-Rooan.>

"My suit will hold."

<As you wish. We draw close.> Turquoise's massive body shuddered, and long vents opened in his sides along his entire length. < We will not be able to talk again until the far side, so please fasten yourself to a vent gill with something heat- and stress-resistant. but also preferably not itchy.>

Bari pulled a harness out of her pack, then let the pack float away into space. It would not survive the trip, and she would not need it on the far side, where she had a small ship of her own waiting and ready. It took several long minutes to attach and seal the links across her torso and legs, until she felt almost a prisoner in the tight

bindings. Then she looped the remainder around the vent gill. "I'm ready," she said. "Omi?"

The silver ball drew near, and she plucked it out of space and tucked it down inside a pocket along the front of her suit. [The indignity!] Omi said, his signal weak. "Oh, shut up," Bari said. Looking ahead, the bright crescent edge of a blue-white

"Oh, shut up," Barı said. Looking ahead, the bright crescent edge of a blue-whit planet loomed near.

The vent gill closed again, holding her fast. She put her hands to her sides and ran through a precise sequence of control gestures with both hands. The straps shrunk, tightening. She took a deep breath, filling her lungs and expanding her chest, then completed the last gesture. The Dzenni suit, technology far beyond human, hardened into an immoveable shell. She could no longer feel the straps, only the unyielding foam that the suit extruded around her. Her faceplate was clear, bright in the light of the planet.

The Rooan herd hit the edges of Beserai's thermosphere, riding the curve of the planet like surfers riding a wave, seeking the mesopause. She caught her breath as noctilucent clouds spread out in wisps below her, then held it as Turquoise's entire back half split asunder and a million thin, iridescent threads tumbled and waved behind, tasting and collecting the rare bounty of elements and ice crystals they passed

through, saving and storing them for the long cold ahead.

So much beauty and wonder. Tears streamed down her face and were quickly wicked away by the suit, leaving only a tickling hint of their passage across her cheeks. As they picked up speed, stealing velocity from the planet as easily as they swept up elements, the Rooan began to swing out again on a new trajectory, the solar wind from Beserai's star now full at their backs. And every Rooan began to flash, in sequence with each other, patterns within patterns. They're singing, she realized.

Bari smiled and wondered what Cardin's computer would have made of that.

Pamela Sargent's last story for Asimov's, "Mindband," appeared in our April/May 2010 issue. Since then, Paramount Pictures has optioned her novel Earthseed (reissued by Tor in 2007), with Melissa Rosenberg, scriptwriter for the Twilight films and executive producer of Showtime's Dexter, to write and produce through her Tall Girls Productions. Tor also published Farseed, second in the trilogy, in 2007 and Seed Seeker, the third, in 2010. Ruler of the Sky, her 1993 historical novel about Genghis Khan, is now out in trade paperback from iBooks. In Pamela's latest story for Asimov's, a mysterious

# STRAWBERRY BIRDIES

stranger reveals the startling truth concealed in ...

# Pamela Sargent

As Addie finished reading her storybook, Maerleen Loegins arrived suddenly at her family's home, as if blown in on a strong wind. She rang the doorbell and in a few minutes convinced Addie's mother that she was the only person to move into their spare room. Addie had never seen her mother convinced so quickly.

"You seem older than most students," Addie's mother said. "More mature, I mean."

T began college late," Maerleen Loegins replied, "and I am working on my master's
degree, not a bachelor's." She had an odd accent and said her name in a manner that
made her sound like she came from far away: "May-er-leen Low-egg-ins." That was

how it sounded to Addie.

"Your master's?" Addie's mother said.

"In physics."

"That's my husband's department. Didn't know there were any women students in physics."

"I am one of two." Maerleen Loegins lifted her brows. She was short enough that Addie didn't have to crane her neck to get a good look at her face. She had large brown eyes and short glossy black hair, wore a pale blue dress, and carried a large suitcase. She looked alert and ready to take charge, unlike Addie's mother, who stood there with slumped shoulders looking as though she was ready to go back to bed.

Addie had a younger brother and two infant siblings, a boy and a girl, who were twins, so her mother had plenty to do at home, while her father was a graduate student and lab assistant in the Hayes University physics department. There, he scribbled indecipherable symbols on a blackboard and supervised students who used pieces of glass to cast rainbows. They also did experiments with something called an

inclined plane, which Addie envisioned as an aircraft tilted to one side and resting on one wing. While he was engaged in these mysterious activities, Addie's mother fluttered around the house looking worried and distracted while hovering over Addie and her brother Cyril or warming up yet another bottle for one of the twins.

But now, Addie thought, they would have somebody to help out. The reason her parents had put an ad in the paper offering free room and board and a small stipend to a college student was to have someone around to look after their children, especially Cyril, who wouldn't be ready to go to school that fall, not even to kindergarten,

and might never be ready.

Addie's mother looked over the letter Maerleen Loegins had handed to her. "Professor Eberhardt recommends you very highly, says he was really sorry to lose you. Why did you decide to leave?"

"His boy is going away to boarding school this autumn, so there was no reason for

me to stay on

Boarding school, Addie thought; it sounded both exciting and scary.

Her mother frowned. "I didn't know Sam was going away to school. He seems aw-

fully young for that."

"He is almost ten years old. He seemed happy about going away, although Mrs. Eberhardt does not seem overjoyed. And moving to the home of somebody in my own department seemed appropriate, even though living in the home of a history professor was most instructive."

Maerleen Loegins took a step toward Addie. "Adelaide," she continued, "do not suck your thumb." Addie jumped back and dropped her hand to her side. "It is not sanitary, and such a habit can deform your teeth." Her voice had taken on a stern, com-

manding tone.

"Well." Addie's mother sighed. "I'm glad we found someone so quickly. Of course my

husband will have to speak to you, too, but I'm sure he'll agree . . .

"Oliver Almstead? Of course he will," Maerleen Loegins said. Addie's mother looked surprised. "I spoke to him at some length this morning, Mrs. Almstead, just before coming over here. He told me that Professor Eberhardt's recommendation was good enough for him, but that he would leave any final decision to you."

"Well." Addie picked up the uncertain tone in her mother's voice. "I suppose . . . I'll

show you the room. I hope . . . well, it isn't very large."

"That is quite all right," Maerleen Loegins said. "Except for a few books I must fetch from Professor Eberhardt's house, everything else I need is in here." She ges-

tured at her suitcase.

The twins, Gail and Gary, whimpered from their room at the back of the house. As Mrs. Almstead led Maerleen Loegins toward the stairway, the two began to shriek. "Somebody sounds distressed," Maerleen Loegins said, pronouncing the word "deestressed."

"Oh, dear." Addie saw her mother look as though she was going to start fluttering around the house again. "Adelaide, would you mind showing Maerleen upstairs? I've got to heat up bottles for the twins." Before Addie could say anything, her mother

had left her standing in the hallway by the stairs.

"Uh, just follow me." Addie led Maerleen Loegins to the narrow staircase and climbed the steps, with the woman just behind her. "That's Dad's study." She waved a hand at the closed door at the top of the stairway. "He likes some place quiet when he's home. Sometimes, when the twins are crying a lot, he even sleeps up here." Maerleen Loegins gazed at the door with a fierce look in her eyes that made Addie feel that she had said the wrong thing. "He's . . . he's . . ." Addie shook her head, not wanting to say that sometimes her father would come home with a scowl on his face and go straight to his study without saying anything to anybody. With his weekend

job for an insurance company, and going to his labs and classes at the university, she didn't see all that much of him even when he was home. The only money he had was from selling insurance and from something called the G.I. Bill, which made Addie see a duck waddling toward her with a piece of paper in its bill, a sheet like the ones with numbers on them that her parents often got in the mail.

"Perhaps he needs some peace and quiet while studying," Maerleen Loegins said.
"We're not so noisy. Cyril and I aren't, anyway. Gail and Gary cry a lot, but they're

we re not so noisy. Cyril and I aren t, anyway, can and Gary cry a lot, but they re only babies, and anyway you can't hear them from upstairs that much." Already Addie heard the sound of tuneless humming coming from the room at the end of the short hallway. Cyril did that sometimes, sat in their room humming and staring at the walls for hours at a stretch. She turned away from her father's study and gestured at the door on her right. "And that's your room."

Maerleen Loegins went to the door, pushed it open, and went inside, with Addie just behind her. The room had a single bed covered with a quilt, a small night table and lamp, a worn red rug, and a window hung with white cloth curtains that Addie's mother had made from sheets. Addie had wanted the room for herself, small as it

was, instead of having to share a bedroom with Cyril.

"You like it?" Addie asked.

"I think it will do very nicely." Maerleen Loegins set her suitcase down by the bed.
"And now you may show me your room."

"And now you may show me your room."

Addie led her into the hall. The door to the large front room was open. The tuneless

humming broke off. A small shadowy form appeared in the open doorway.

"Cyril," Addie said, "this is Maerleen Loegins. She's going to be staying with us."
She wondered if Cyril would just stand there and stare at the floor, run back into the room to huddle in the corner, or start shrieking and banging his head against the

"May-er-leen," Cyril mumbled.

Maerleen Loegins said, "How do you do, Cyril?" Her voice was softer. Cyril backed away from them as they followed him into the room. Although he was almost six, two years younger than Addie, he was nearly as tall as she was, with hair so blond that it was almost white. He gazed past them with his pale blue eyes, then shuffled to one side.

"Strawberry birdies," he said as he plopped down on the floor. "Over there." He

pointed at the wall behind them.

Addie turned, knowing what she would see. On the green surface of the sunlit wall, two rows of shadows shaped like miniature cars crawled across the wall, one

row upside down, the other right side up.

"That's them," Addie said, pointing at the shadows. "That's what he calls them, strawberry birdies." She didn't know how Cyril had come up with that name, but he had his own names for a lot of things. The dogwood tree in the backyard of their next door neighbors, the Meyers, was a "brahbee" and the cribs Gail and Gary slept in were "brangbugs."

Maerleen Logins watched the shadows for a bit, stepped over to the three front windows to look outside, then came back and sat down on the floor next to Cyril.

"How often do you see them?" she asked.

Cyril shook his head.

"In the afternoon," Addie said, "when it's sunny. That's the only time we ever see hem."

"Do you know what they are?" Maerleen Loegins asked. Cyril did not reply: "Those little cars are reflections from the roof just outside your windows, the flat roof over your front borch."

"Cars?" Ĉyril said.

"Cars like the ones going by outside. The tin surface of the roof picks up the im-

ages and projects them onto the wall."

Cyril gazed at the silhouettes in silence. He would, Addie knew, keep staring at them until the shadows grew fuzzier and finally faded away. Maerleen Loegins touched him lightly on the back; he leaned into her as she looped her arm around him, surprising Addie. Cyril hated having strangers, or even people he knew, get too close to him; she had expected him to shrink back or push the woman away.

She trudged toward her bed and sat down on the pink coverlet, gazing resentfully at Cyril's bed on the other side of the room. Their father had promised to put a partition across the middle of the room, leaving two front windows for her, one for Cyril, and a clear path to the door for both of them, but he hadn't put a divider in yet and would be even busier when school started, so maybe he would never get around to that. It wouldn't be like having her own room anyway, even with a partition. Now she wished again that Cyril would go away, that their parents would send him to one of those places where, according to her mother's friends, children like Cyril were better off, and then felt shame at the thought.

Maerleen Loegins looked toward her and smiled. "Adelaide," she said, "you do not

like to watch the shadows?"

Addie liked her smile, and that she had called the images on the wall "shadows" instead of "strawberry birdies," but didn't like being called by her full first name. "Call me Addie."

"Addie?"

"All my friends call me Addie. It's just Mom and other grownups who call me Adelaide."

"Then Addie it will be."

"What are you called? Are you a miss or a missus?" Addie's parents had always told her to use last names for adults who weren't relatives.

"Just call me Maerleen."

"Okay." Addie smiled. Maybe it was better to have somebody like Maerleen Loegins living here than to have her own room.

Addie and Cyril played with the newspaper, which Cyril had brought up to their room after breakfast, while Maerleen went to her room to unpack. Addie had wanted to see what she would pull from her suitcase, but Maerleen had squinted at her in a way that said she wanted to be left alone.

"Ike," Cyril said as he tore the front page from the paper; Addie recognized the smiling face of President Eisenhower in the photo. "Ike," Cyril said again as he folded the paper into an airplane, while Addie wondered if he had somehow learned to read and was hiding it.

"I like Ike." Cyril said.

If Cyril knew how to read, even a little, he was ready for school. Maybe his headbanging, wild shrieks, and long frozen silences were only an act, so he could skip school and stay home to do whatever he wanted.

"Adelaide! Cyril!" Their mother was calling to them. "Your father's home!" Cyril dropped his paper airplane and shuffled toward the hallway, Addie at his heels. Maerleen stood outside the door to her room.

"Dad's home," Addie said to Maerleen. "That means it's almost time for supper."
"Follow me," Cyril said, the "me" exploding from his mouth as he marched toward

"Follow me," Cyril said, the "me" exploding from his mouth as he marched toward the stairs, swinging his arms.

Cyril ate his tuna noodle casserole in silence, shoveling it into his mouth with a spoon without either playing with his food or staring at it until their mother had to

feed it to him herself. Addie peered at their father as they ate. He looked more tired than usual and was silent as their mother discussed the household duties with Maerleen. She would help with caring for the twins, look after all of the children whenever their parents were out, and do some of the dusting and vacuuming.

After supper, Mr. Almstead retreated upstairs to his study, Cyril wandered off to the living room, and Addie helped her mother and Maerleen clear the dishes from the table. Even though the kitchen windows were open to the evening air, the air inside was hot and oppressive. By the time they had stacked the dishes in the sink, the twins were crying again.

"Better check Gail and Gary," Mrs. Almstead murmured, looking even more flustered than she usually did. "Sounds like their diapers need changing."

"I shall be happy to help," Maerleen said.

Mrs. Almstead wiped her forehead with the back of a hand. "Adelaide, go keep an eye on your brother."

Addie headed through the dining room toward the front of the house. Cyril sat on the living room rug staring at the television. The sound was off; blurry black-and-white images danced on the screen. He would just sit there until he got tired enough to go to bed.

She went upstairs, wishing that Leslie Vicks was back from summer camp. She could have gone to Leslie's house to watch television, or else Leslie could have come here to sit on the front porch and spy on any neighbors out for a walk or sitting around on their own porches. Leslie always told stories about the neighbors, even if she probably made most of them up. Old Mrs. Merkel would give you the evil eye if you took a shortcut through her backyard. Leslie suspected that the young blonde woman who had just moved into the apartment on the second floor of Mr. and Mrs. Smith's house was a secret Communist spy, maybe because she had a weird accent or maybe because Leslie's favorite television show was I Led Three Lives. She had a crush on the actor who played the undercover FBI guy, who was always dealing with scary Communists who talked about liquidating people; Addie would imagine somebody slowly dissolving into a puddle of water. She wondered what kinds of stories Leslie might think up about Maerleen Loegins.

The door to her father's study was open. Both his desk and the cot under the window were covered with books and papers. She crept toward the door and stood there

until her father looked up from his desk. "Addie? Something wrong?"

She shook her head.

He beckoned at her with his cigarette. "Come on in, then."

She shuffled toward him. "How long is Maerleen Loegins going to be here?" she asked.

"I asked her if she could stay with us at least until next summer. If Cyril's ready for ..." He fell silent. "Depending on how things go, we'll see what happens after that." He stubbed out the cigarette in the ashtray on his desk, already filled with a mound of butts and ashes. "You like Maerleen, don't you?"

Addio noddod

"I barely know her, but Morey Eberhardt has nothing but good things to say about her, and she'll be a big help to your mother. Things have been harder for her since the twins came." Addie thought of what it had been like just after Christmas, when her mother had disappeared from the house and come back a while later without her huge belly and with two new babies. Grandma Lohmann had taken the train from New York City to come and stay with them and had not left until February; all that time Addie had known that everybody was worrying about her mother. Having the twins was hard; her mother had not been her usual self. Sometimes she would burst into tears for no reason at all. Now she fluttered around and sometimes snapped at Addie, but at least she didn't crv.

Her father suddenly reached for her and pulled her onto his lap. "You're a good kid, Addie," he said, and she wondered why he was telling her that. "Never a complaint out of you. You'll be a bir help to Maerleen, won't you?"

"Sure."

"Things'll be different when I'm out of grad school. They'll be a lot better. You'll see." She had heard him say that to her mother only a few nights ago. "Things'll be better," he had said to her. "It'll be easier on you, too." Addie had overheard them from inside the bathroom.

"But you love teaching," her mother had told him.

"Not enough money in it, not with four kids, not with Cyril—" He had sounded angry for a moment.

"But you always said you never wanted to work on weapons research," her mother had said then.

"Maybe I can't afford to be that choosy."

Her father let go. Addie slipped from his lap. "Good night," he said, which was the signal that he wanted to be left alone. She left the room and closed the door behind her.

Addie was in bed and her father had retreated downstairs by the time Maerleen came upstairs with Cyril. Addie sat up, arms draped over her kneees, while Maerleen took off Cyril's T-shirt and pants and helped him into his pajamas.

"Did he give you a lot of trouble about brushing his teeth?" Addie asked.

Cyril shook his head violently.

"No, he did not," Maerleen said.

"Good about the emp, too," Cyril muttered.

Maerleen leaned closer to him. "What's an emp?" Addie asked, thinking it had to be another of her brother's made-up words.

"Maerleen put one in. Here." Cyril put his hand on the back of his head near his

Maerleen said, "I did no such thing."

"Yes you did."

"I smoothed back your hair. That is all." Addie glimpsed the fierce look in her brown eyes before she turned away. "Now be quiet and behave yourself." Maerleen tucked him into bed and turned out the light on his night table. "Good night, Addie and Cyril."

"G'night," Addie mumbled.

"Sleep tight," Cyril said in a singsong voice. "Don't let the bedbugs bite."

Maerleen disappeared into the darkness of the hallway, leaving their door open as their mother always did, because Cyril was afraid to go to sleep with the door closed. Addie heard a soft click and knew that Maerleen had closed her own door.

She lay there, listening to the sound of people talking, punctuated by the occasion-

al muted blare of a trombone. Her father was watching television, as he sometimes did before going to bed. Usually the indistinct sounds soothed her into sleep, but she lay there, awake, turning over on her stomach and then onto her side before the sounds abruptly died.

Her father had gone to bed, Cyril's rhythmic deep breaths told her that he was asleep, and yet she was still awake. That must be because of Maerleen, because someone new and strange was in their house.

omeone new and strange was in their nouse.

Addie sat up, slipped from her bed, and tiptoed toward the doorway. There was a

sliver of light at the bottom of Maerleen's closed door.

She went into the hall, expecting Maerleen to fling her door open at any second.

She could always say that she was going downstairs to the bathroom. Somebody was

talking behind the closed door; it had to be Maerleen, but why would she be talking if she was in the room all by herself?

Addie crept to the door and pressed her ear against it.

"... sez dee fond hem." Maerleen was almost whispering the words. "Empsen, but ... neh." There was a long silence, as if she was listening to somebody on a telephone, and then, "Bay."

Addie scurried back to her room, then peered around the doorway.

There was no telephone in the room, so if Maerleen was talking to somebody when nobody was there, maybe she had some kind of secret radio device, something that a

spy might use. But what would a spy want with anybody in their house?

Maerleen's door opened. Addie imagined that she would come out in a long coat, even if it was the middle of August, holding a parrot-headed umbrella like the one in the storybook Addie had been reading that afternoon. Instead, she came out in a long white bathrobe and headed for the stairs. Addie waited until her shadowy shape had disappeared below the railing along the stairwell, then followed her. Probably only going to the bathroom, she thought as she crept down the stairs, disappointed. She reached the downstairs hallway just as the front door opened.

Maerleen went outside, closing the screened door behind her but leaving the other door open. Her bathrobe was a luminescent bluish-white in the moonlight. Addie

held her breath as she crept toward the doorway.

Maerleen stood on the porch, looking toward the street. A man in a pale sports jacket, a floppy dark bow tie, and dark pants stood on the sidewalk, facing the house. Addie froze, even though she was sure he could not see her through the screen. He had a mop of thick white hair, a long, thin face, and held a flat metal object that looked like her father's cigarette case in one hand.

Maerleen lifted an arm and shook her head.

"Tamara," the man called out.

Maerleen shook her head again. "Not now."

"Will see." The man nodded, looked down, and disappeared.

Addie caught her breath. He had just winked out all of a sudden, the way people sometimes did in her dreams. Maybe she wasn't really awake. But he couldn't have disappeared. He had only stepped into the black shadows under the small tree in their front yard, where she couldn't see him.

Maerleen turned toward the door. Addie scurried into the living room and slipped

behind the sofa.

Maerleen's pale robe made her look like a ghost as she moved through the hallway. Addie held her breath until she heard creaking sounds from the stairway. Maerleen and the man outside obviously knew each other. Maybe they were in love. Maybe they were spies; that was what Leslie would think.

Addie crept out from behind the sofa. The front door was open. She went to close it and saw that the man was across the street now, his back to her, and then he moved

away from the streetlight and disappeared again.

She closed the door and went upstairs slowly, treading lightly on the steps that creaked. She made it to the second floor without making any noise, but as she passed Maerleen's room, heard her voice behind the door.

"...don't know," Maerleen was saying. "Give me more time. Think ..." Addie hur-

ried to her room, afraid to hear anything more.

"Addie!" Cyril shouted from his bed.

"Shh!"
"Addie!" he cried out in an even louder voice.

"Shut up," she whispered. "You'll wake up Maerleen." She got into bed and pulled up the top sheet.

"She won't hear me," Cyril said in a soft, calm voice that did not sound at all like his. "And she's already awake. I heard her."

"Be quiet."

He did not say anything else. She lay there, counting her breaths, which made more sense to her than counting sheep, and at last fell asleep.

Leslie Vicks said, "I think she's weird." Leslie had come home from camp the day before and had just met Maerleen a little while ago.

Addie sat on the front steps of her house with Leslie and Bobby Renfrew. Erastus, the Meyers' orange-furred cat, had wandered over from next door and was stretched out on the step next to Bobby. Cyril was behind them on the porch playing with Lincoln Logs: he had already but together a ranch house and a stagecoach station.

"She's okay," Bobby protested.

Leslie leaned toward Addie. Her brown hair was longer, and her bangs came down to her eyes. "I think she's up to something," Leslie whispered. "Maybe she's a spy."

Addie looked around uneasily, even though Maerleen had left right after meeting Leslie to spend the afternoon at the Hayes University library. At least that was where she had told Addie's mother she was going, but maybe she was meeting that man she had spoken to from the porch two nights ago. Maybe they were climbing the hills of the Hayes University campus to look at the gorges, or having a picnic in the park near Delphi College.

"I said maybe she's a spy," Leslie repeated. "A Red spy, from Russia."

Addie waited for Bobby to tell Leslie she was silly, with all her talk about spies. Instead he said, "Maybe a spy would come here."

"To Delphi?" Addie snorted, "Why would a spy come to Delphi?"

"I wasn't talking just about the town, I meant your house,"

"Why would a spy come to my house?"

"Because your dad's a scientist," Bobby replied, "and scientists know stuff, like how to make A-bombs."

"Dad's still in school," Addie said. "He isn't a scientist vet."

Bobby squinted at her through his glasses. "But he wants to be one, doesn't he? This what he's studying, and there's a couple of profs at Hayes who worked on the A-bomb, aren't there? Maybe the Commies want to get them on their side."

"That's silly," Addie said, but Bobby might be on to something. His father had joined the Army and died in Korea, so Bobby had good reason to worry about Commies, and his mother had a job at the town library and was always bringing books home for him to read. He was smart; he knew more than she did, anyway, with all his reading, which made her feel that she had to at least consider whatever he said.

"Maerleen isn't a Commie," Cyril said behind them.

"I didn't say it," Bobby said, "Leslie did."

"Did not." Leslie scowled. "I said maybe she was a spy."

Cyril said, "She's not a spy, neither."

Addie turned to look at her brother. He didn't sound like himself, and now he was staring right at Leslie as if he actually saw her, instead of looking down or away from her.

"How do you know?" Leslie said. "How could you know?"

"I just know." Cyril shrugged. "She showed me another strawberry birdie this morning."

That was impossible, Addie thought; they only saw those on the wall in the afteroon.
"She said she came down a thread looking for me," Cyril continued, "and it took a long time but she found me, and then she showed me the strawberry birdie, and then we went downstairs and she went out."

Leslie snickered. "Strawberry birdies."

"Don't make fun of him," Bobby said.

"She sounds funny when she talks. She sure doesn't sound like an American." Leslie stood up. "Let's go to my house." She waved an arm at Addie. "Come on."

Addie did not move.

"You just gonna sit there with Bobby and that stupid cat and your retard brother?" "Don't call him a retard," Bobby said.

"Well?" Leslie put her hands on her hips. "Are you coming?"

Addie shook her head, not trusting herself to speak. Leslie stomped toward the sidewalk, looked back over her shoulder, then ran down the street.

"She's mad," Bobby said as he scratched Erastus behind the ears. The orange cat

hunkered down, resting his head on his front paws. "But she won't stay mad." Addie said, "I don't know about that. Anyway, she shouldn't have said that about Cyril." Bobby got up. "Wanna go to Capetti's?" Capetti's Haven, a store that sold candy, paperbacks, and comic books, was one of Bobby's favorite places.

"Can't. Mom told me to keep an eye on Cyril."

"Bring him along, then."

She glanced at her brother. He seemed all right now, but he might start acting up if they went downtown, she'd have to watch him whenever they crossed the street, and she didn't feel like walking the three blocks to Capetti's just to hang around while Bobby looked at all the Tales from the Crypt comics his mom would not allow him to read at home.

"Nah," she said. "We better stay here."

Bobby shrugged, then hurried toward the sidewalk and down the street. Addie gazed after him until he disappeared around the corner. "You told Leslie you saw a strawberry birdie this morning," she said, "but you couldn't have."

"I did too. Maerleen showed it to me." Cyril took the ranch house of Lincoln Logs apart and put the pieces carefully back into the box, then pushed the stagecoach station under the porch swing. "Wasn't like the other strawberry birdies."

"What do you mean?"

"There was this big grey building like a church but with sand all around it, and these little tiny people standing on the steps in front, and next to that was this big long building with this big loop pointing up at the sky." He made a swooping motion with his arms. "And yesterday she showed one with all this water with patches of red stuff all over and some buildings sticking up out of the water."

"Another strawberry birdie? When?"

"Yesterday. She said something about it showing where she came from, but I didn't see any people."

He was making it up. But Cyril didn't make things up. He used funny names for things, but he did not tell stories that weren't true.

"Ask her," Cyril said. "She'll tell you." He pointed across the street. "There she is." Maerleen stood on the other side of the street, in the yellow shirtwaist dress she had been wearing that morning. She stuffed something into her handbag, then crossed the street. Addie wondered why she had not noticed her standing there before.

"Go ahead," Cyril said as Maerleen reached the sidewalk in front of their house.

"Ask her."

"Cyril says you showed him a strawberry birdie this morning," Addie called out as Maerleen approached them. "And he says it wasn't anything like the little car shadows, that he saw people and sand and a big long building with a loop, and yesterday you showed him another place and said"Why did you tell that to your sister?" Maerleen glanced from Addie to Cyril.

"Because it's true." He crouched down and crawled toward the porch swing.

"What did you show him?" Addie asked.

"Think of them as being like your moving pictures," Maerleen said, "except that they are not showing images of a made-up story. They are showing something that has ... that will happen."

"Maerleen?"

Addie looked up. Her mother stood behind the screen door, dressed in the sleeveless white shirt and baggy blue shorts she wore only at home. "I thought you were going to the library," she continued.

"I have finished my research there."

"Then maybe you could take Adelaide and Cyril to the park. I'd rather have them playing there than watching television here. Just keep them away from the pool." Their mother was afraid they might catch polio if they swam in the park pool.

"Then you do not need me here?" Maerleen said.

"Gail and Gary are asleep, so I'm going to take a nap." Mrs. Almstead wiped her forehead with one hand. "It's too hot to do anything else. Just bring them back by suppertime." She retreated into the darkness, leaving the door behind the screen door open.

"Then we shall go to the park," Maerleen said.

Addie did not want to go to the park, especially if they could not swim in the pool. By now the older boys would be hogging all the swings, the slides, and the jungle

gym, while the girls just sat around and watched them.

Cyril put away the rest of his Lincoln Logs, tucked the box under his arm, and stood up. All he would do at the park was play with his Lincoln Logs. She couldn't go anywhere without her brother tagging along and doing something weird that made other kids laugh at him. Her face flamed. She suddenly wanted to hit him and wished he would go away and never come back.

"Adelaide," Maerleen said.

"It's Addie!" she shouted.

"Addie, why do you look so angry?"

Cyril widened his eyes. She was suddenly ashamed of her anger. "There's nothing to do at the park," she mumbled.

"Perhaps we should go there anyway." Maerleen said, "and find out what there is

to do."

Addie stood up and shoved her hands into the pockets of her shorts. Erastus

Addie stood up and snoved her hands into the pockets of her shorts. Erastus padded up the steps and curled up under the porch swing. Cyril looked down at the

box under his arm, then put it on top of one of the wicker chairs.

"Come on, children." Maerleen slung the strap of her handbag over her shoulder; Cyril grabbed her left hand. "Come on." Addie felt fingers grip her right hand tightly. They were suddenly moving toward the sidewalk; Addie scurried to keep up with Maerleen, who kept glancing behind herself with a worried look on her face.

They turned right, in the direction of the park. A red Chevrolet convertible sped past them, followed by a green Pontiac station wagon, and then the street was empty of traffic. As they came to the small bridge a block from their house, Maerleen let go of Addie's hand, fumbled with her handbag, and pulled out a flat silvery object. The familiar bridge seemed to flicker and then disappeared. For a moment, all Addie saw was a distant patch of light at the end of a dark tunnel. Her stomach lurched and then, all at once, they were standing in the park next to the jungle gym.

"Here we are," Maerleen said.

But this couldn't be their park. The jungle gym was rusty, several bars were missing, and the rest of the structure looked as though it would fall apart if she tried to climb on it. All of the grass was dry and yellow, with sandy patches, even though it had been green and in need of mowing just the other day, while the swings and the slides had disappeared. The pool was gone, replaced by a broken-up pit of rubble, and the brick building next to the park was only a couple of walls of reddish rock. On the other side of the street, she no longer saw the gray house with the turret and the big white house with the wraparound front porch, but instead a high metallic wall. They were the only people in the park; she wondered why no other kids were around.

"What happened?" Addie asked. "How did you do that?" The air was strange, too, so hot and thick and sticky that sweat was already dripping from her bangs onto her

face. "This doesn't look like our park."

"But it is," Maerleen replied.
"But why—"

"No one lives near here now," Maerleen said, "but it is the park."

"I don't understand."

"It is the park as I know it . . . as I will know it, as it will be."

"I still don't understand."

"It is what the park will be a long time from now."

"I don't like it," Addie said.

"My life and the lives of those like me are not easy lives," Maerleen said. "We did not inherit what we might have had, but even so, our lives might have been much worse. We might not have lived at all."

Cyril's face was slick with sweat. He leaned against Maerleen. She put an arm over his shoulders. He was different when he was with her—quieter, able to look into

her face, not shoving her away when she reached out to him.

Maerleen's eyes widened; she suddenly looked afraid. Addie turned her head and saw a man on the other side of the park, standing near a metal pole. He wore a red and white striped jacket, white pants, and a straw hat with a wide brim. The man took off his hat, revealing a head of thick white hair.

Maerleen said, "I did not think he would follow us here."

"Who is he?" Addie asked, not wanting to admit that she had seen him before, during Maerleen's first night in their home.

"A colleague. A companion." The man walked toward them. "Not yet." Maerleen

called out to him.

"Then when?" he shouted back. "Why ya here? Ya supposed to ..." and then came a stream of strange words. Addie made out only a few: "Shouldn't." "Boy." "Long time." "Waiting." He kept glancing at Cyril, and Addie had the feeling that they were talking about her brother. Maerleen stepped toward him; the man took a step back. "What are you waiting for?" Addie understood his words now.

"It does not matter how long I wait," Maerleen said.

The man smiled. "No, it doesn't, not to us, but it does to them." He waved an arm at Addie. "Keep waiting, move up and down the threads like you been doing, and you complicate things, you change too much stuff, you mess things up." She could understand all of his words now, even if she didn't know what they meant.

Maerleen put a hand on Addie's shoulder. "I cannot leave the girl to her unhappiness, to torment herself after what must happen. If we could only—"

The man glared at Addie. "Keep delaying, and it's worse for her, too."

"What are you talking about?" Addie asked.

"See, we came here to get something," the man replied, "and when that something, or someone, isn't here any more, it changes things." He was speaking very slowly now. "Things happen that wouldn't have happened, and things don't happen that would have happened otherwise. That's one way to put it, but maybe a better way is just to say that Maerleen came here to get something we need, and the longer she takes to get it, the more complicated things get."

"You are not very good at such explanations," Maerleen said, "and there is no need to confuse these children with them"

"There's no need for you to keep delaying."

Maerleen's fingers dug into Addie's shoulder. "But to leave her behind, to know she will not be—"

"You can't take her with you."

Don't talk to strangers. Dad had told her that many times. Don't talk to strangers and look out for your brother. This man had to count as a stranger even if Maerleen

knew him, and Addie could tell that she was afraid of the man.

Maerleen grabbed Addie's hand. Everything lurched around them; Addie suddenly wanted to throw up. The jungle gym rippled, as if she was looking at it through water, then took shape as she remembered it, with shiny, unrusted bars. Her nausea eased as she breathed in some of the drier, cooler air. The park still didn't look right; the slides were farther away from the jungle gym and there were only six swings instead of seven. Except for a couple of older kids in swimsuits over by the pool, probably the lifeguards, the park was empty of people.

Addie trembled. Her legs gave way under her and she suddenly found herself sit-

ting on the grass. "What happened?" she whispered.

"We went to the park," Maerleen said, "and my friend followed us there." Her voice was shaky, "But now we have to go home because, as you see, it's almost time for supper."

"Almos' time for supper." Cyril repeated.

"It can't be," Addie muttered. "We only just left the house." But the park wasn't as bright with sunlight as it usually was in the afternoon, and across the street a man and a woman were sitting at a table on the screened-in porch of the big white house.

She did not remember seeing a screen around that porch before. She looked up.

"What's going on?" she asked.

Maerleen's face was pale. She bit at her lower lip.

"Look," Cyril said. "A strawberry birdie." He pointed across the street, at the gray house with the turret. A picture like one they might have seen at the movie theater appeared on the front of the house, near the front steps, and then sharpened into the rusty jungle gym from the deserted park they had just left. The white-haired man in the stringel acket stood next to the jungle gym. holding his straw hat over his chest.

The man waved his hat at them and then the image slowly faded away. "No,"
Maerleen said under her breath. She took Addie's hand, clutching her fingers so

hard that it hurt, and led the children away from the park.

Addie's father hurried across the bridge toward them, with a worried look on his face. "Figured I'd better come looking for you," he said to Maerleen as he reached down to hug Addie.

"I am sorry we are late," Maerleen said.

"Aren't that late, but their mother was getting worried."

"Can't be that late," Addie said as they crossed the bridge. "We weren't gone that long." But it was already getting dark, with cars parked on both sides of the street and in driveways, as they were when people were home from work. "We went to the park, except it was different, with..." Maerleen's hand squeezed hers, hard.

"Saw a strawberry birdie," Cyril murmured.

"Thought you only saw them on the wall in your room," Mr. Almstead said.

"Saw one at the park," Cyril said.

"You did not," Maerleen said. Her voice sounded funny, as if she felt bad about telling the lie.

"Did too, on the side of that big house."

Maerleen said, "You just imagined that you did."

"Didn't."

Addie's father halted. "Exactly what did you see?" he asked.

"A man," Cyril replied. "Maerleen talked to him in the park. Saw him in the park and in the strawberry birdie on the house."

"What man?" Now their father sounded really upset. "Have I met him?"

"He is a friend," Maerleen said in her shaky nervous-sounding voice. "You do not know him. He waved to us at the park, that is all."

"You'll have to bring him around sometime," Mr. Almstead said. "Sarah and I should meet him if—"

"He was in the strawberry birdie!" Cyril shrieked.

"Cyril!" Now her father sounded angry. Addie was afraid to look up at him. She caught a glimpse of Maerleen's face; she was biting her lip again. Addie was torn; if she admitted that Cyril was telling the truth, their father might get even more upset. Don't talk to strangers; he had told them that so many times. You have to look out for your brother, he doesn't know how to look out for himself. She had failed to look out for him today, and if she told her father that Maerleen had let them talk to a stranger, one who seemed kind of scary, maybe he would send her away from their house for good.

"I saw him!" Cyril screamed. "In the strawberry birdie!" Across the street, Mrs. Smith stood on her front steps, shaking her head.

Addie said, "I didn't see him."

"He was right there!" her brother shouted.

"He only waved at us!" Tears stung Addie's eyes. "And I didn't see your strawberry birdie!"

Mr. Almstead reached for Cyril, then backed away and thrust his hands into his pockets, looking bewildered.

Maerleen said, "Be quiet," and put her hand on the back of Cyril's head. He seemed about to twist away, then suddenly stood still; his pale eyes stared past Addie, as if he could not see her.

"Cyril," Addie said. She had been waiting for him to throw himself onto the sidewalk, or run shrieking down the street.

"How did you do that?" her father asked.

Maerleen drew away from Cyril. "How did I do what?"

"Calm him down like that." He shook his head. "You've got the magic touch." He frowned. "Now that I think of it, he's been behaving a lot better since you've been with us."

Maerleen could take good care of Cyril, Addie thought. That was what mattered, more than admitting the truth to her father.

"Emp," Cyril said. "Emp," he said in a louder voice.

"Don't you mean ump?" Mr. Almstead said. "In baseball, it's an ump. Were some kids playing baseball at the park?"

"Ump," Cyril said, shaking his head. Maerleen looked down.

Their house looked different this evening, its stucco surface more yellow than beige, and somebody had moved one of the wicker chairs off the porch. A cat with ginger and white fur was stretched out on one of the front steps. Mrs. Almstead paced across the porch, hands jammed into the pockets of baggy khaki shorts; she looked up, seemed about to run toward them, then waved and went inside.

"Mr. Almstead," Maerleen murmured, "I am sorry. Please be assured that I want

only what is best for your children."

"I don't doubt it," Addie's father replied. "Anyway, I'm not about to make a federal case about your being a bit late bringing the kids home."

"Thank you," Maerleen whispered.

The night air outside the bedroom window was cooler, a reminder that autumn was coming. Addie sat by the window next to Cyril, her hands folded under her chin and resting on the sill. Behind them, Maerleen shook out a quilt and laid it over Addie's hed

A patch of light appeared at the edge of the roof outside the window and grew into a bright pale blue square. The white-haired man, dressed in a white jacket and blue pants this time, stood inside the square.

A hand clutched Addie's shoulder. "Go away." Maerleen said behind her.

"Not until you do what you were sent here to do," the man replied. "Go away," Maerleen said. Her other hand rested on Cyril's back.

The square dissolved. The man took a step toward them, then winked out.

"Strawberry birdie gone." Cyril said. His voice was steady. He pulled away from Maerleen and stood up.

"What's going on?" Addie whispered, afraid.

Maerleen knelt next to her. "You want what's best for your brother, don't you?"

"Sure."

"So do I. That is why I am here—to do what is best for your brother and for many other people as well."

"Then do it," a voice said from the doorway. Addie jumped to her feet and turned to face the white-haired man. "Stop dithering."

"How did you get in here?" Addie asked.

"That's for me to know and you never to find out." The man held a flat silver case like the one Maerleen had carried around that afternoon; he quickly slipped it into a jacket pocket. "It's time." He chuckled, as if he had said something funny.

"You better go," Addie said, "or my dad'll call the police."

"Your father's in the kitchen having another drink with your mother, who's whining to him about how tired she is and how are they ever going to make it with all you kids and with Cyril the way he is while your father keeps telling her it'll all work out somehow."

Cyril squinted at the man.

"And in a few moments, your parents will go to bed and fall asleep, because your mother is exhausted and your father's had too much to drink. I went up this thread and checked on that before I ducked back here. But if Maerleen doesn't do what she's supposed to do, everything isn't going to be all right. It's not going to work out for Cyril and your mother and your father and you, and maybe not for a whole lot of other people, either. She's already off the thread we started on, and if she keeps moving across more threads—"

"You have no business saying that in front of these children," Maerleen said, and

Addie saw the fury in her dark eyes.

"What's going on?" Addie whispered. She grabbed at Maerleen's sleeve. Her legs shook and she sat down, hard, "What's he talking about?"

The man stepped back into the darkness of the hallway; only his white jacket and hair were visible. "It's up to you," he said, and the white hair and jacket vanished.

"Maerleen," Addie said.

"It is all right. Allow me to ask you a question. Do you want what is best for your family, for your brother? Do you know what his life will be if I do not intervene?"

Addie turned toward Cyril. He sat down and stared out the window, ignoring her. "I will tell you. He will eventually need to go away from your home to another place.

He will not be able to make use of his gifts, his special talents. He will have to go away, and then your father will not become what he might have been. He will give up his studies and his teaching and take other work to support his family and to pay for Cyril's care. I was not able to see clearly what happens to him after that, only indications that his life would be unhappy and he would be working at what he hates but doing well at his work in spite of that. He and those working with him will bring about a catastrophe-a disaster, a war. This thread will snap, and those near it will also snap, more threads than would have been lost otherwise. That is what I am trying to prevent."

Addie shook her head, confused.

"But if Cyril goes away with me," Maerleen said, "his life will be better and so will your father's. At first, things will not be so good. Your father will be angry and worried, your mother upset and despairing. They will notify your police and search for both of us. When we are not found, they will feel sorrow for a while, but that will pass."

She could not know anything like that, Addie thought. Nobody could know such

things. She was making it all up.

"Eventually your father will find solace in his work, in teaching the young. Your mother will rear her other children and find a purpose of her own. This thread will not break. And Cyril will have a life with us, one in which he can use his gifts instead of having them wasted."

What about me, Addie thought; Mom and Dad will blame me. They would be angry with her for not looking out for Cyril. She thought of all the times she had wished him gone, had hoped they would send him away, had longed for her own room and not having to watch out for him. They would know that she wanted him to go away, so they would be right to blame her. She was suddenly sorry for all the times she had hoped for Cyril just to disappear.

She could not let Maerleen take him. That was the only way she could make up for

all of her hateful thoughts.

"What did you do to my brother?" she asked. "What's an emp?"

"It is a small thing, a device that dampens certain of his senses so that he—" Maerleen sighed, "It helps him, Without it, he would be overwhelmed by what he sees and hears and senses."

"Then why does he have to go away if you can make him better with that?"

"Because he will need more than an emp, and he will not get what he needs if he continues to live along this thread. He will not be able to use his gifts. Your father will also not do what he should do. Cyril must go with me."

This could not be happening, "You can't take him away. You can't,"

Maerleen leaned toward Cyril and took his hand, pulling him to his feet, "Come

"No." Addie threw herself at the woman, "Leave him alone!"

"Adelaide--"

"You can't have him!"

Maerleen let go of Cyril, grabbed Addie under her arms, and threw her onto her bed. Addie lay there, too shocked to move, as Maerleen reached for her brother again. Her left hand closed around his wrist; she held her flat silver case in her right. An opening appeared in the wall, revealing grey stone steps that led to a tall glassy door. "Strawberry birdie," Cyril said.

Maerleen said, "I am sorry."

"You can't take him!" Addie forced herself up and flung herself at the two of them. She held on to Cyril, trying to pull him away, and then felt Maerleen's arm around her shoulders. The floor heaved under them; Addie felt sick and squeezed her eyes shut, afraid she might throw up.

The ground under her feet was still. She opened her eyes and saw a glass door. "Maerleen?" Addie whispered.

"It is all right," Maerleen replied. "No one will harm you."

Addie turned to face a barren landscape of sand and rocks that stretched to what looked like giant jagged teeth on the horizon. "I want to go home," Addie said. If Maerleen would only take them both home, she would be good and always look out for Cyril and never again wish that he would be taken away.

As she turned back, the glass door slid open. The white-haired man stood in front of them. "Ya know what ya done?" he shouted. "Do you know?" he said more quietly.

"I know." Maerleen said.

"She can't stay here and she can't go back down that thread to where she was, not now."

"I know."

"Then why did you bring her here? Why did you let her—"
"She does not deserve what would have happened to her where . . . when she was.

There would have been no forgiveness for her. Even if her parents had believed she did nothing wrong, she would always have carried the blame inside herself." Maerleen knelt next to Addie. "Your brother will be well cared for here. You believe me, do you not?"

next to Addie. "Your brother will be well cared for here. You believe me, do you not?"
Addie nodded, forcing herself to believe it in spite of the desolation outside the glass door.

"Then you must go back now, but all by yourself."

Addie swallowed. "But he said—" She pointed at the man. "He said—I thought—"

"Do not think of what he said. Turn around."

Addic turned to her right to see a hallway with walls that seemed made of mist. She could barely make out the room at the other end of the hallway, but it appeared to have windows like the ones in her bedroom.

Maerleen said, "You must walk down that passage, now."

"Will you ever come back?" Her eyes were tearing up. "Will you bring Cyril back home, just for a little while—"

"Go." A hand pushed her forward. She stumbled into the passage. The windows rushed at her as she slid down the hallway, unable to stop herself. She rolled onto the floor, righted herself, and got to her feet.

Cyril and Maerleen were only tiny blurred images on the wall, standing at the end

of a tunnel, and then they winked out.

At last Addie got up and stumbled toward her bed. Tears ran down her face; she could no longer hold them back. Cyril could not be gone; he was downstairs watching television with the sound off or playing on the porch with his Lincoln Logs. She fell across the bed, unable to stop crying. Dimly, outside the windows, she heard the sound of a car driving by, and then a voice that sounded like Bobby Renfrew's calling out to somebody else.

She wiped her eyes. It had been night only a little while ago, and now there was sunlight outside her windows. She sat up and looked across the room. Cyril's bed was gone, and in its place stood a small bookcase and a painted chest of drawers.

"Cyril," she whispered, and then saw that the green bedroom walls were now yellow. This isn't my room, she thought, suddenly frightened; Maerleen had sent her somewhere else. She sank to the floor and put her hands over her eyes. She was dreaming; that had to be what was happening. All she had to do was wake up and everything would be the way it had been.

"Addie?"

She turned her head. Her father stood in the doorway, his tie loosened, his jacket draped over one arm. "I could have sworn—" He shook his head. "Came up to look for you a few minutes ago, and you weren't here. How'd you get past me?"

She did not know what to say. For a moment, she had the feeling that someone else was in the room with her and her father. "I was here all the time," she said, although

that wasn't what she had meant to say. Maerleen took us both away, but she brought me back. That was what she wanted to say. She struggled to recall what the woman had said to her. He frowned. "What's the matter? Is something wrong?"

She shook her head. The woman had a strange name, but she couldn't remember what it was.

"Then come on downstairs. Dinner's almost ready." He moved away from the door; she got up and followed him into the hall. The door to the room down the hallway was open; she glanced inside as they passed and saw blue curtains and a Brooklyn Dodgers pennant on the wall.

She darted into the room. A baseball glove sat on top of a dresser, and a pair of sneakers on top of a blue rug. Through the half-open doorway of the small closet, she glimpsed a couple of pairs of pants draped over hangers. This wasn't the way this room should look, she thought, but could not remember what it had looked like before.

"Your brother's downstairs," her father said.

She turned around. "Gary's downstairs," her father continued, "and I hope you're not going to get into a fight with him at dinner. Your mother says you two were really going at it this morning."

She ran from the room, pushed past him, and headed for the stairs. Her hand

gripped the railing as a boy appeared at the bottom of the stairwell; he pulled off a baseball cap to reveal white-blond hair. "Cyril," she whispered. But this boy wasn't Cyril. A woman in shorts and a sleeveless white shirt appeared next to the boy; her smile was so open and her gaze so

steady that it took Addie a few seconds to recognize her mother.

"Addie," her mother said, "what's the matter?" Addie stared down at the boy. "You're not Cyril." She tried to remember who Cyril

"What are you talking about?" the boy shouted. "I'm Gary, your brother. Or are you too dumb to know?" "But then what about . . ." Addie turned toward her father. "What about the twins?"

"What twins?" Her father looked really worried now. Addie took a step toward him, then ran past him back to her room.

She had lost something. She could not escape that thought. Maybe it was still here, somewhere in her room. She dropped to her knees and looked under the bed, but saw only a pair of sandals and a few dust balls. As she stood up, she noticed shadows on the wall. She had seen them so many times before, miniature silhouettes of cars, reflections of the traffic in the street outside her window.

She sat down on her bed and watched the shadows flicker across the yellow wall. "Addie?" Her mother came into the room, trailed by her father and brother. "Is

everything all right?"

She had gone to her room earlier to read; that was coming back to her now. "I'm

okay," she replied.

"Are you sure?" her mother continued. "You must have been up here all afternoon." "I'm fine," Addie insisted. "I was going to read for a while, but I must have fallen asleep." She looked over at the bookcase. She had taken a storybook out of the town library a few days ago; that was the book she had planned to read that afternoon.

Gary made a face at her, screwing up his eyes and sneering. Their father put a hand on his shoulder. "Come on, slugger," he said to the boy. "Might as well head downstairs and wash up before supper." The two retreated down the hallway.

The reflections on the wall had blurred. "Strawberry birdies," Addie said.

"What did you say?" her mother asked.

Addie pointed at the shadows. "Strawberry birdies," she repeated, not knowing where those words came from, but feeling that they fit the shadows somehow. The sense of something lost came over her again and then faded. O

One wonders what *The News of the World*, and other unscrupulous types, would make of . . .

## THE LIST

### Tim McDaniel

The front door—that's where they would come through. The house did have a back door, in the kitchen, but there were piles of bricks, scraps of wood, and collapsed cardboard boxes filling that entranceway, as if one of the former tenants had raided demolition sites and tornado leftovers and piled his takings there, God knew why. If anyone came that way, it'd cause a lot of racket, and the junk would slow them down, give Kurt time to blow them to hell.

Kurt sucked the life out of his last cigarette and threw it to the ground. It had been a long night, and there was really only one way it could end. At the time—when he'd pried the list out of Hunter Martinez' bloody grip—he'd thought he'd finally struck paydirt, silver and gold, the end of all his troubles. Instead, robbing the

dead Mexican had bought him a ticket to nowhere good.

Someone had boarded up the windows, so Kurt couldn't see the outside sky. But he knew the sun wouldn't be up yet. The house was cold; the fire he'd had going in the little fireplace had burned itself out. Kurt dragged his dainty wooden chair closer, to allow his back to benefit from the remnants of heat escaping from the ashes. Winter. If he survived the night, he'd go somewhere where winter never happened.

His eyes grew heavy again. Too long with no sleep, but if he dropped off now he would miss whatever small chance he would have, when they finally came for him.

He looked down at the list. Just a bunch of names, and not just kids either, with notes after each one. But enough material to blackmail anyone he cared to, for however much he would think to ask for—yet he knew it was unlikely he'd ever have the chance to use it. Everyone else—everyone, from Big Red to the corner pot dealer—wanted that list, and eventually they would figure out where he'd gone to ground, and come for it.

Who originally had obtained the list, Kurt didn't know. Big Red ran a tight outfit, and things like this didn't normally slip through his fat fingers. Sure, it must have been an inside job—maybe The Dentist, maybe another of the Little Crew—but once let loose in the world the list had changed hands more times than he could count.

Hunter, he knew, had got it off of Nucifora, and chances were good Nucifora had got it off of Rusty Ippolito and the Fake Belgian. And then after Kurt got it, he'd had

to dodge Yuri, hanging for once with Lemon Lee. Talk about odd couples.

He wouldn't have to worry about them anymore, but he figured Émiliano would be coming along, with Lowlife. Emiliano. Why would he hang with a guy whose name no one knew? Then again, Emiliano had no standards. He'd turned on Kurt after the chop shop bust fast enough.

Or maybe Big Red himself would be coming for it. God knows he wasn't a stranger to getting his own gloves dirty, and he had some pretty serious home-cooked custom-

made shit.

Shit. His eyes jerked open. He must have fallen asleep; the fire's embers had died

out completely, nothing but cooling ash in the fireplace.

But he thought he saw a sliver of light under the door. Daylight? Was this long night finally ending? And if he had survived it—well, another day. Another chance to get out. If he kept his head, he could choose one, maybe two off the list, get them to fork over the cash and unload the list on them, let them take the coming truckload of crap. He wouldn't get greedy. That's what caught all those guys. They didn't know when to quit.

Another hour. He'd wait another hour, and if was still all quiet, he'd slip a board off a window in the back, get to the parking lot at the train station, and steal a car. He'd drive until the gas ran out, then find a payphone in whatever town he ended up in,

choose a name from the list, and make the call.

Yeah. He could do this. If Emiliano had known where he'd gone, he'd have come already. And Big Red had connections all over, but even he couldn't see everything. An hour, when the parking lot was filled, then he could run. The train station was maybe ten minutes away, if he moved slow and careful. Once in the car, he'd stop for nothing.

Kurt swallowed. Yeah.

From behind him, a soft sound—just some bit of soot or something falling into the ashes in the fireplace.

Kurt looked again at the door. No one there, and it was almost time to go. He opened the gun, checked to make sure it was ready. He checked it twice.

A presence behind him. Kurt started to swing the gun around, but a meaty, gloved hand closed on it, inexorable. But how—

Damn. The fireplace. He'd forgotten about Big Red's thing with chimneys.

"Ho, ho, ho, asshole," was the last thing Kurt heard. O



"His insights will of course be sorely missed – but this does imply that we're on the right track."

Steve Rasnic Tem's new novel, Deadfall Hotel, will be published as a limited hardcover by Centipede Press this fall, followed by Solaris Books mass market and ebook editions in May, His collection of noir fiction, Ualy Behavior, appears from New Pulp Press in 2012, and Crossroad Press just released an audio edition of his novel The Book of Days. In his latest story for Asimov's Steve takes us into the future to pensively examine many different aspects of . . .

## **EPHEMERA**

#### Steve Rasnic Tem

t was disturbing, the things you forgot. If it was an appointment there were techpologies to remind you with floating images and messages across your walls and ceilings, or even an urgent voice delivering an emphatic reminder directly into your ear. repeated every thirty seconds if desired. And for birthdays, holidays, Daniel had the recorders running, so he always had at least a half dozen angles of his son opening presents. But for the random moments that changed an attitude or defined a new perspective, recording devices were seldom on hand, leaving only unreliable memory.

They'd taken their son to the beach. He'd been only a few months past two, and it had been a fake beach fronting a fake ocean—the real ones being too nasty or too difficult to reach within the prevailing travel cautions. Lex had come into the world during the middle of the last of three major Asian pandemics, a nightmarish period for parents around the world. The airlines never quite recovered, and neither Daniel nor Trish imagined they'd ever travel again. But the sand seemed real enough, and whatever the water might be it was still wet, and apparently mostly water, and crept

up the shore the way water will.

Lex giggled at the way the sand mushed around his fingers, but became increasingly alarmed at how it gathered stubbornly under his nails and into every crevice. The more his little hands slapped at it, the more tightly it clung. But he got used to

What he loved more was making his marks: loops and curlicues and more-or-less parallel tracks that seemed purposeful—given the serious faces he tried on while making them—like some intuited alphabet or hand-crafted math. When the tide came in, triggered by some anonymous stranger in a hidden booth, Lex grew distraught as his marks washed away, and they'd left.

In the years of accumulating, studied detail since then, Daniel had forgotten the incident. Then a few days ago, triggered by a report on consumer behavior and a news item on the rapid decline of America's beaches, he pieced together a recollection. The details of a life faded all too quickly into the tide if someone didn't pay attention.

Daniel knew the world as a repository of overwhelming detail. In an earlier age you could be local, you could filter, you could ignore. Now the data came in floods, and some very large companies and even a few governments trusted and paid for his attention. The desk underneath his fingers went from a cool and depthless pool to a hallucinogenic array of computational, communications, and entertainment displays rearrangeable with finger gestures and voice commands. Most of the words and images related to preprogrammed queries whose results he could read quickly for the clients who paid him an analysis fee.

Although this ocean of information was still frequently referred to as the "web," that had ceased to be an adequate metaphor some time ago. The world of electronic information was now much more fabric-like. Information came to him in fields and flows and transformational currents that he had to ride skillfully or drown in the

surrounding irrelevancies.

Daniel knew better than most what a volatile and dangerous place the world had become. Perhaps it had always been this way, but now the dangers could be minutely and obsessively dissected. Sometimes he could feel himself succumbing to all the implications—and with a child to raise.

Too often he felt that contemporary life had become like an escape from a burning building. The reasonable thing was to grab only what was essential as you made your desperate race for the door. But it's hard to act reasonably when you're living inside a fire.

Daniel's desk rippled gently with blue light. "Ascher appointment in fifteen min-

utes," it murmured

He tapped the desk and a library of old books displayed over the walls of his office, except for a strip above the door where framed LP covers from the 1960s and "70s—Aqualung, Rubber Soul, Let It Bleed—were showcased, and a vertical rectangle on the right where a physical bookcase of wood-grained plastics stood, half-filled with his tangible book collection, each volume wrapped in a protective zelloprene sleeve. New volumes in his virtual collection had golden stars floating over the spines.

His eyes strayed to the right corner of his desk where Lex had placed several new drawings, executed with aggressive strokes of compressed pigment on expensive sheets of handmade paper. On the top sheet was a monkey swinging through a jungle, its arms and legs loose and rubbery and stretching all the way across the page. Several additional arms and legs had been added. Daniel thought, "spider monkey." The rest of the page was filled with complementing coiled trunks and giant leaves and tropical birds distorted curvaceously. The drawing had a cartoony style but the use of color was bold and exciting.

He had hundreds of such drawings in files, although these days kids were given electronic slates whose images could be stored theoretically forever. Trish wanted Lex's drawings scanned and archived and the originals disposed of—but he'd been unable to get rid of a single one. To get rid of even one piece seemed a betrayal of Lex's evolving self. One by one he laid the drawings face down on a red dot shimmering near the middle of his desktop, scanned them into memory and backups, then placed them carefully into a sealed box under his desk for later archiving.

"Daniel?" His wife's voice fluttered moth-like over the desk. "Daniel, there's a man

here. Should I tell him you're busy?"

Daniel used both hands to spread open a virtual window in the desktop. Ascher's greasy gray collapse of hair was unmistakable as the old guy bent to peer into their front door's eye. He suddenly realized just how much Antonio Ascher resembled that figure on one of his album covers: Jethro Tull's "Aqualung."

Daniel had bought his first edition Life on the Mississippi from Antonio Ascher as well as several other ancient Twains. Trish avoided even physical contact with the old books, but as far as Daniel was concerned there was still room for a few more.

"That's Mr. Ascher. Ask him in, Trish."

A static buzz hovered over the desk. Trish had opened the channel, but wasn't speaking. Finally she said, "I thought you always met him in public places, like out at that People's Mall?"

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"I don't always have time to get out there. I invited him over." Then he added, "Trish. he's harmless."

She didn't reply, but Daniel could see their front door opening, Aqualung shambling inside. Trish kept her back against the wall, gesturing him forward. Daniel

went to his office door and let him in.

He did smell a bit, but no worse than some of Daniel's friends who lathered on exotic fruit and vegetable washes. Ascher's face appeared clean and perhaps too vigorously scrubbed for their meeting. He wore one of those formerly popular wearonce-and-throw-away smocks, a common concert giveaway. A faded figure with decaying mouth and eyes dominated the back, but the rest had evaporated into a cloud. Here and there the supporting fibers were exposed, reinforced with tape. A soft bag with a stained pavement pattern hung from his shoulder.

Daniel imagined Ascher had never seen anything like his virtual library and pre-

pared to be complimented.

"Your office is a bit empty," Ascher said. "I hadn't expected that, since I know you're a book lover." Daniel was at a loss. "It's just that you don't have much in here. The desk, that little bookcase—some nice books, by the way—I recognize a few you bought from me. A few great old album covers, and this lovely library pictorial on your walls. It doesn't feel much like a working space to me. I brought a couple of books for you to look at." Ascher plopped into Daniel's chair without permission and began rummaging through his bag.

Daniel held his annoyance in check, remembering how little sense of manners Ascher had shown when he'd seen him at the People's Mall. He had been generally gruff and appeared to enjoy insulting the tastes of potential customers. But for some reason Daniel very much wanted to please this man. "Keeping tight control over the number of objects around me helps me focus. I deal with massive amounts of elec-

tronic data—I don't want my environment to distract."

Ascher paused mid-rummage. "Why would it be distracting?"

"It—"it just would." Daniel gestured toward the library images. "This isn't decoration. It's a virtual library. I can retrieve the volumes and open them and read them directly from the wall at any size, or I can transfer them to the desktop and read them there. I value the physical books, but look at the library I've collected here—and I can add pretty much anything I want to it."

Ascher stared at the wall with his brilliantly rheumy eyes. "Tm aware of the technology—it's like the standard reader only a lot bigger, fancier, and much more costly, I imagine. A woman at the mall gave me one of those school-issue readers a few years ago. Still works—I use it to read things I don't really care about, but I would hardly call it a book."

"Then what would you call it?"

Ascher shrugged distractedly, as if he'd already lost interest.

"Let me show you what it can do." Daniel raised his chin and spoke into the air. "Library, Twain, Life on the Mississippi." Each shelf shifted rapidly, and then a book near the center floated out as if under ghostly control. "Life on the Mississippi by Mark Twain" appeared on the spine and the book opened on the title page. "Library, maximum enlarge." The image of the open book filled the wall space, making it easily readable even from across the room. Daniel made a brushing movement in the air and the book's pages turned.

"Is that some kind of generic edition?" Ascher asked. "I'm not seeing anything par-

ticularly distinctive about it."

"I can get any edition you want." Daniel couldn't keep the annoyance out of his voice. "Library, Heritage Press edition, 1940s."

The image of the book transformed. The light green cloth cover displayed a riverboat emblem.

"That's the 1944 edition," Ascher said.

"Library, interior illustrations," Daniel continued. The pages turned again, show-

ing a series of drawings and watercolor images.

That's Thomas Hart Benton," Ascher said. "See how the drawings flow-the riverboat, the trees, the towns along the shore, even that man up on deck-all the forms have that sense of water in them. Can you bring up the first edition?"

"You mean like the one you sold me?"

"No, that one was second state. I've never had the first state. Bring up the first edition, first state.

"Okay, sure. Library, first edition, first state." The cover was brown cloth with a gilt image of a man on a bale of cotton. "Hmmm . . . looks like mine."

"Can I see page 441?" Ascher stared at the image intently.

"Library, page 441," Daniel demanded. The last page of the book displayed. "There's a tailpiece. Mine doesn't have that, I don't think. Library, magnify tailpiece."

The ornament at the end of the text expanded a thousandfold. "That's the head of Mark Twain in flames from the urn," Ascher said. "That's how

you know it's the first state. His wife thought that was just too morbid and tasteless. She insisted that it be removed, and so it was for the second state. Like the copy I sold you. Fairly impressive, actually. I take it these are scanned from library collections?"

"That, and from private collectors. But hey, there's more. Library, collection setups, cycle." Several rows of ornate bookcases appeared, a stained glass window at the back.

"So it can emulate actual libraries," Ascher said. "I don't believe I recognize this one." "It's the Merton College library, Oxford." This scene was suddenly replaced by a stone-walled room with few bookcases, but with chandeliers, a tapestry, and display cases on ornate red Persian rugs.

"Oh. I was there in my younger days," Ascher said, "The main Reading Room at the

John Carter Brown Library at Brown University."

"Right you are. I can call up around a hundred private and institutional libraries both past and present. I even have a few custom layouts—there's one with shelving built into the walls of a gigantic, enclosed spiral staircase. Breathtaking."

The book dealer nodded, the glow from the display illuminating the cracks, tics, and moles in his face. Daniel wondered how old Ascher actually was. In an age when even the urban poor managed to maintain a well-scrubbed, "clean" look, Ascher couldn't be more out of place. "During my teaching years it would have been useful to have had something like this, if nothing more than to show my students what a real book collection used to look like."

"You taught?"

"Twenty years. Cultural Studies, 'what makes us human,' they called it. Did you study your 'culture' with a living teacher, by any chance?"

"It was all computer-based by the time I started."

"What makes us human, indeed."

"I see your point. But that same technology has given us what you're seeing now which I believe honors those printed volumes."

"But it's all just light, correct? Bits of information fronted by a recognizable image. The books aren't there anymore—they've been killed, and these are just the ghosts we have to remember them by."

"Well, some would argue that they're just in a different form, that the words are

all that matter."

"But to call them a collection of words is to see them just as so much information. Putting them into physical books is how we used to honor them, to say that these were cultural artifacts that commanded respect, that attention should be paid. You've been very kind to me, Daniel. But sometimes I feel like one of those old out-of-

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print volumes not selected for this 'honor' of digitization, no one knowing what I might have to say, or caring much what I might have to offer. No one knowing that I even exist at all. But you've been a good friend."

At the end of his visit Ascher appeared anxious to leave, and when Daniel opened the door he rushed out, colliding with Lex. Ascher was knocked sprawling on the

floor, the contents of his satchel spilt and scattered through the hall.

"Oh wow, I'm sorry." Lex looked pale with embarrassment. He stooped to help Ascher up, his hands recoiling almost immediately when they made contact with Ascher's clothes. But Daniel was proud to see his son start over, grasping Ascher's hand in his and supporting the man's shoulder with the other as they both struggled to stand.

Then his son went down on the floor again to pick up the scattered books and papers. Daniel went to help, and together they gathered what appeared to be a sheaf of Ascher's hen-scratched notes, several antique pieces of printed paper (ads, an old restaurant menu, ancient theater tickets, a yellowed train timetable), a couple of old books, and assorted old-fashioned pens and pencils. Daniel watched his son handle each item with almost an archaeologist's care, periodically wiping his hands on his pants as if he'd gotten something foul on them.

All that remained was a plastic bag containing a very old city newspaper. The bag had split open, and tiny bits of brown-yellow newsprint had drifted out onto the car-

pet. Lex stood over it, staring. "What is that, Dad? What's wrong with it?"

That was the very last edition of a newspaper published in this city. Thirty years ago," Ascher said. "I forgot to give it to you, Daniel. I've got dozens of copies—thought you might like one."

"Oh, yes, thank you. I've never actually seen one up close."

Ascher looked at Lex. "Go ahead and take a peek, son. It's not a collector's item in that shape. Before all the news sites, a newspaper was how a lot of people got most of their daily news. Television eventually took over much of the load, but it was the news sites that finally killed the newspapers off. They didn't make sense economically anymore."

But Lex didn't move. Daniel bent and retrieved the paper, scraping the disintegrating bits back into the bag. He looked at Ascher. "I don't believe my son has ever

seen newsprint before. I'll show it to him later-thanks again."

A while after Ascher left Lex came to see his father. "Dad, where do you know that man from?"

"He's a book dealer, works out of the People's Mall. I bought most of my collection from him.'

"You spend a lot of time there. I've heard Mom talk about it."

"Yes, I do. I should take you sometime—I think you'll find the mall pretty fascinating."

Lex looked doubtful, "Well, maybe. I don't want to be rude, but why is he so dirty?" Daniel laughed. "His hygiene definitely could be improved."

"Isn't he afraid of getting some terrible disease? All these precautions they're al-

ways talking about-I bet he doesn't do any of them."

"He's of a different generation, Lex. Your generation, and mine to some extent, we think about those issues all the time. But for fellows his age-sometimes they act like the world hasn't changed at all. Some of these more scholarly types, especially, they can become so involved in intellectual pursuits they forget all about physical appearance. They spend their money on books instead of new clothes and haircuts. I understand that-sometimes I get so wrapped up in my work I forget-"

"You'd never forget to bathe! Or to sanitize yourself thoroughly."

"Well, probably not. But I had a new baby at a time when a lot of other parents an appallingly huge number of parents—had children who were dying."

Lex winced. "Some of the guys at school, I guess they joke about it. They say 'there's just more for us now,' that kind of thing. But Dad, this guy looks like those

old guvs who live down by the bridges." "He has a home, I believe, although I've never seen it. He's a collector, and old-fash-

ioned. Eccentric. He's really very well-educated. A person could learn a lot just listening to him. I'll take you next time I go. I really think you might like it.'

Lex looked uneasy, as if he had more to say, but whatever it was he kept it to himself.

Over the next few months Daniel had little time for reading, or "book gazing," as Trish sometimes called it. A random series of financial crises and resource shortages created both new opportunities and precarious dealings for his various clients. He spent long hours developing hierarchical lists of time sensitive recommendations balancing economic gains, job loss, and cultural change, losing sleep and weight in the process, seeing his family infrequently. Now and then Lex would message him the worst joke he could find, or a scan of some new, particularly intricate drawing in compressed color stick. (No mess on the hands, and the pigments were guaranteed non-toxic. His son stayed away from all paints.) The anxiety in these drawings was evident. Daniel tried to reassure his son with light-hearted return messages, but there was really very little he could do.

They'd first moved down into the core of the city for Lex's sake. After the last pandemic it was considered the cleanest part of the city, with everything that had been there for centuries razed and the ground purified to a depth of several hundred feet. The first residential and nonresidential dwelling frames went up to meet the challenges of rapidly changing functional need. When the planning teams began filling in the frames it had looked like a gigantic toy construction set with pieces missing, the random spaces between units providing views of distant vistas. He and Trish had been lucky to get one of the first spaces in the sprawling residential frame.

The disadvantage of the frames as far as Daniel was concerned lay in their convenience—a family could get anything they required there. Lex had no interest in ex-

ploring other parts of the city.

The entertainment complex underneath the frames was a nod to the history of the area. When Lex was small Trish and Daniel would take him down there to dine in corporate chain eateries tricked out to look like old-fashioned diners, pizza parlors, and funky ethnic restaurants.

When he was about seven, Lex found a fly on a rail only a few feet from where they were eating. He kept getting up from the table and going over and touching the

fly, which was hard to the touch and never moved.

When Daniel found a free day he talked a very reluctant Lex into going with him out to the People's Mall, promising he would take him into parts of the city he had never seen before. Lex did seem to enjoy the dangling rail train that ran high over the ring of low neighborhoods and beyond to the edge of the city center and down again into the sprawling People's Mall.

The real history of the city was kept in places like this, albeit cut into pieces and packaged for easy resale. They followed a hard walkway that ran like a highway between rows of temp-huts of press sheet and plasi-can. Many had been mounted on thick black pads with some bounce to them. Others were sunk into beds of a rough

and tumbly stone that seemed to pull at your shoes when you walked in it.

Each booth or shop specialized in a different type of product: obsolete electronics, old culinary devices, medical equipment, videos in formats current and extinct, antique knobs and switches, locks that no longer locked, lights that no longer lit, meaningless signs and both structural and nonstructural architectural artifacts, and of course a sampling of old paper-odd sheets and instructional manuals, general non-

**Ephemera** 49 fiction, and a variety of fictions by authors long dead. In one of these overstuffed booths in the paper aisle Daniel had first encountered Antonio Ascher, finder and dealer and caretaker and possessor of books and miscellaneous reading material.

"Dad, where did all this stuff come from?"

Daniel looked around. "Good question. A lot of places, I suppose. A lot of it from the old downtown. Before the frames went up, it was the busiest place you could imagine. It was in constant change—buildings torn down and rebuilt into something else, new roads and sidewalks appearing almost overnight. Nothing seemed finished, much less permanent—people were forced to move every couple of years. The average lifespan of a building was no more than six or seven years."

"But that's crazy."

"It wasn't because of inferior materials—it was because what they needed the buildings for was always changing. Transport, residential, shopping, everything was in flux. Some buildings were obsolete the moment they were finished. The frames are permanent, but their configuration is fluid."

"But all these things-what are they?"

"They came out of the old structures, every time one of them was torn down things people used, and parts from the buildings themselves. Imagine everything you can see dismantled, hauled away. Something new is put up in its place. I imagine that if you could only buy enough of these pieces you could reassemble that time."

Lex laughed. "That's strange, Dad."

"Very."

Lex passed by a number of booths without much apparent interest in the goods they displayed, then for some reason became fascinated by a shop specializing in flatware, thousands of different styles and patterns. He knew what they were, and had his own personal set of basic self-cleansing eating utensils, which like many in his generation he rarely used. Daniel was amused by his son standing there examining antique eating tools while eating a snack from a carton emblazoned "Untouched By Human Hands" with its built-in mouth-delivery device slicing the portions to a size Lex had specified on its dial.

"Maybe I'll turn these into an art project," he explained, leaving with a heavy sack

of several dozen clanking pieces.

Structure #764 was in the location Daniel remembered, but it was now occupied by a seller of old timepieces. "I haven't seen old Antonio in weeks. He cleaned out his space and I was the next on the list. I hear he was having troubles at his residence. He left with several customers owing him money. Are you one of them?"

Daniel considered. "He had some newspapers I was interested in." A half-truth,

but not a complete lie.

"Then I guess it's okay. He left a card with an address—I know he could use the money. He spent more getting old books and papers than he did on clothes and food." To his surprise, Daniel wasn't familiar with the street name, even though the dis-

trict code should have placed it not that far from their own section.

As the city grew, even with the focus on adaptable spaces, there were always gaps, vague borders, and fuzzy zoning due to conflicting authorities or ill-fitting interests, which kept the pieces from matching perfectly. Sometimes it was just a dead space where utility access lanes overlapped, or because neighboring property lines were historically in error a few yards one way or the other. This left stray structures that fit into no one's idea of a plan. Daniel was not surprised to discover that Antonio had managed to make such a building his home.

Trying to find the house of one Antonio Ascher via Daniel's usual electronic resources proved fruitless. No such house number as "382" anywhere in the city center, And no "Greene Street," although there had been one over a hundred years ago. He would have to try to find the house on foot, and was both surprised and pleased

that Lex wanted to go with him.

They printed out the last city diagram that still featured a Greene Street, and using the most current map, Lex drew in the present building placements as best he could. They spent the morning wandering that section, climbing over fences and taking narrow paths between buildings, pulling back bushes to reveal old signs, finding faded boundary lines and street markings, apologizing regularly and profusely when questioned by often-annoyed tenants and private security patrols, charming them into answering questions about the neighborhood when told of Lex's mythical school history project.

Finally, only a few blocks from the very heart of city center, where two conflicting drainage levels had arranged an uneasy compromise by means of a series of cleverly engineered retaining walls and improbable terracing, a small rectangular patch of clay rose a few feet above the surrounding land. Much of the lot was fenced, marked "Property of Waste Water Management." But planted stubbornly into a small unfenced corner of that clay rise was a two story brick-and-concrete patch Victorian sporting a meaningless "382" in six-inch numerals of green-tarnished brass. There was no sign for a "Greene Street" anymore. There wasn't even a street, just a well-worn path through weeds and clay.

The porch seemed to have been imperfectly attached. The back wall was out of true, and with the roof's unusually wide and uneven eaves, gazing up at the house from below was a dizzying experience.

Lex was so excited he raced for the porch, Daniel laughed, But then Lex stopped

abruptly at the steps. "What's wrong?" Daniel called.

"I don't think anybody lives here anymore!" Daniel caught up and Lex continued, 
"There's all these brown and gray houseplants on the porch. Lots of them—it's like a 
dead jungle up there. And the shades are down all the way around, except that one—
it looks boarded up from the inside."

Daniel walked a little closer while his son stayed where he was. "It's okay, Lex. Come here, I want to show you something." His son joined him slowly. "I don't think the houseplants have been dead that long. See, there are touches of green—maybe their care just got away from him."

"Why wouldn't he just move them inside?"

Daniel considered. "Maybe there wasn't room for them inside."

"Dad, it's a huge house. Are we going to find a dead body in there?"

"Let's hope not. Walk with me around the side." After a few feet Daniel pointed. "See, I don't think that window is boarded up. It might be the back of a bookcase. The shade's fallen down behind it, trapped against the bottom of the glass. And the other shades, see how they're all pushed against the glass from the inside like that? I think that's because there are things inside stacked up against them, pressing the shades to the panes. Antonio probably doesn't want people looking inside, but I'm thinking he couldn't get to the shades to raise them even if he wanted to. Come on, let's go knock on the door."

Lex lagged well behind him going up the steps, keeping away from the dead plants and raising his arms to avoid any possibility of accidental contact. Daniel felt a little sorry for him and handed him a pair of plastic gloves. "Put these on, but just let me check out these plants."

"Dad, don't touch them."

"I don't plan to. Just looking, promise." Daniel stepped closer to the miniature forest of crumbling stalks and withered leaves, leaning over to get a better sense of the interior plants. "I don't see any spots or blemishes or anything else suspicious. I really think he just stopped watering them, and I'm guessing some are root bound." He looked over at his son, still pressed close to the far porch railing. "You know, plant diseases that make humans ill are pretty rare anyway. I can't remember the last report I saw . . ."

"Rare doesn't mean perfectly safe."

"Okay, can't argue with you there." Daniel went over to his son and put a hand on his shoulder. "Did you bring a breathing mask?" Lex nodded. "Then put it around your neck in case you feel you need to use it once we're inside."

"Won't that be rude?"

"I wouldn't worry about that very much. Antonio himself isn't beyond getting a little rude at times."

Daniel knocked, swift and loud. The door had a spongy sort of quality and he could feel it shift in the jamb with each knock. After a few minutes the door shifted inward a crack, a reddish eye appearing above the chain. "Antonio? Is it okay that we came by? We went to the Mall, and I gather you don't have a shop there anymore."

The reddened eye blinked, then a thin version of Antonio's voice came out from behind the door. "Daniel? My house isn't really well, company ready at the moment."

Daniel tried to smile reassuringly. "You know, I don't think that matters to us." He could feel Lex's restlessness. "We just wanted a quick visit, and it wasn't very easy finding you."

The eye disappeared. Daniel glanced at his son, who still looked unhappy with him. There were a few moments of soft rustling inside and no more words from Antonio. But at least he hadn't shut the door yet. Then the chain clicked and the door eased open. "I apologize for my place—I never have guests, you see." Antonio was wearing an old pair of pants under an oversized and tattered bathrobe that made him look hunched and shrunken. His face was red, his beard crusty. Daniel had never seen him this bad. "But since you went to so much trouble, I can't very well turn you away."

"Antonio, are you okay? What happened to your business?"

Antonio struggled to get his glasses on. When he finally did, he looked startled, and a bit embarrassed, to see Lex there. "My arthritis got a lot worse—that's all it took. I couldn't manage the trip out to the Mall anymore, much less taking care of things in the booth. Just like that, it was over. I had to let everything go pretty cheaply. I'd been putting off the joint replacements for years—I didn't see how they could take care of me here—I'd be stuck in the care facility. Then I got old enough they wouldn't do it for free anymore—I missed the deadline."

"But there are still programs to get that kind of surgery for the elderly."

"They'd want to see my living space, Daniel." He looked nervously at Lex. "Obviously I couldn't let that happen. My situation here, well, it bends a few rules." Antonio turned abruptly, moving stiffly across the cluttered floor. "Let me get you fellows some chairs." The debris—a trampled mix of papers, pamphlets, mail, and bits of packaging—shifted and rustled with each step. Daniel turned to check on Lex. His son was nervously twiddling with his breathing mask, but he hadn't yet slipped it on. Brave bov.

"Dad, have you looked at this place?"

"Well ..." Daniel turned around, genuinely focusing on their surroundings for the first time. The house was dim, the few bulbs in a couple of chandeliers doing very little to cut through the gloom other than to lovingly illuminate the thick cloud of dust forever descending. They were standing in the entrance hall, an area about ten feet square whose floor appeared to be a colorful collage of paper items, the discarded mail deliveries from a previous decade. But along the edges the beautiful marble floor underneath could be detected. Directly ahead of them, across this trampled paper entrance, was a staircase to the second floor. Approximately two-thirds the width of each stair was being used for book storage, stacks two feet high or more. Much of the narrow

passage on the right had apparently been used for sorting old magazines. At some point there had been a small avalanche that completely obscured entire sections. Dirty shoe prints all the way to the top showed that Antonio had kept using these stairs.

The wide doorway on the right appeared to open onto a large dining room, if Daniel had guessed correctly that the wooden platform supporting numerous boxes of books and sheltering a similar quantity of full boxes beneath was in fact an old dining room table. It was too dark to see much of the room beyond, except for a patch of burnt yellow that might be a bit of window shade glowing from the sunlight outside. The angular silhouettes vaguely visible in this dimness practically reached the ceiling, however, suggesting to Daniel that the area was probably impassable.

The spacious room off to the left from the entrance might have been a fancy parlor at one time, given the fine woodwork and the ceiling decorated with flowers, cherubs, birds. Now it was completely populated with boxes a good seven feet high. Some of the supporting boxes had partially collapsed, twisting and damaging the old hardcovers inside, and an attempt had been made to stabilize the stacks with a network of ropes and elastic cords attached to hooks in the woodwork, ceiling, and floor,

suggesting cargo tied down on the deck of an ocean-going vessel.

The various tied-together stacks made an assortment of sheer-walled islands in that location that continued at least partway into a room beyond, with narrow goat trails meandering between them that a man Antonio's size might navigate sideways. Some individual boxes had exploded under pressure, herniated time capsules vomiting paperbacks and catalogs and small objects over the other boxes, into the paths, and cascading into the entranceway where Daniel and Lex stood.

In several corners there were great, brownish, crumbling piles of newspapers. Daniel supposed the ones on top might be readable, but he was pretty sure the papers lower down were crumbling to dust, adding their load of fiber to the thickened air.

At several points in these rooms boxes had been pulled out with no consideration for the effects on the delicate balance, apparently to examine or display individual items. Such favored items were much in evidence, arranged everywhere you looked, but at least they'd been kept off the floor. Scattered among these there were also file boxes made of transparent plastic, no doubt meant to hold the more precious, smaller paper publications.

Even with his vast experience sifting through bewildering streams of miscellaneous information, Daniel at first actually hadn't noticed all the bookcases, perhaps because this was how he expected books to be kept. Along the walls in every room, floor to ceiling bookcases stood, but so dim-lit and dusty and blocked by other things that they resembled decaying library-themed wallpaper rather than anything threedimensional. Small, homemade bookshelves fabricated from planks and wire hung in the odd places above doorways and on the backs of the doors themselves. In one corner an actual net had been hung from the ceiling, its full catch of books threatening to escape.

"Dad, I think I'm going to have to leave," Lex stated shakily.

"I understand, son." Daniel turned around. Lex was wearing the breathing mask. He looked like a frightened surgeon. "At least I don't see any garbage. I'm smelling old books, old paper, probably mildewing newsprint, but nothing spoiled or rotten." "Dad."

"I know, I know. It's still pretty bad. You know your way back to the public transport, right? There's that rail stop a block away, and I think the moving walk branches just a little further than that."

Lex was nodding a little too vigorously. "Dad, you should come with me. This isn't healthy." But Lex already had one hand on the doorknob, so Daniel knew he couldn't wait, whatever his reckless Dad decided.

Ephemera

Antonio shuffled into the room out of breath, carrying three battered metal folding chairs. "Sorry it took me so long. Been a long time since I needed more than one chair in here. Lex? Are you leaving already?"

"He has a little problem with dust, Antonio."

"Oh. Oh, of course. It's bad stuff—I shouldn't be breathing so much of this old book air myself. I guess you just get used to it, but I tell you, it's a killer." He looked alarmed at what he'd just said. "I mean, if you were exposed to it for an extended period of time, then it might kill you."

Daniel hadn't experienced this talkiness or awkwardness in Antonio before. He was feeling a little embarrassed for him. "Oh, yes, we understand. Lex would like to stay but he really shouldn't."

"Dad, you should come too."

Daniel paused. "I won't be very long. I'll put a mask on."

"Oh, absolutely!" Antonio said with agitation. "You really should. I would, but I've been breathing it in so long, well, it probably won't get any worse than it already is.

Maybe I've built up an immunity."

Lex waited, his hand still on the doorknob. Antonio raced over and grabbed one of the clear plastic boxes of small printed items. "You know what I've got in here, Lex? Ephemera. That's what we call it. It's quite an interesting specialty, really. They're paper printed items that were originally meant to be discarded after a relatively short period of time. They were never meant to be saved, certainly not collected. The people who used them considered them worthless. Garbage. I suppose it's really a dead-end specialty, I mean, that's all done electronically these days, isn't it? Tickets, advertising, menus?"

Lex looked hesitant, nodded. "I guess so."

"Exactly. But you know what? These sorts of items are really of great historical interest. If you want to know how people in a particular culture actually lived, I mean on a day-to-day basis, you don't go to their history books, or to the things they wrote or said that they hoped might be passed down through the ages, the official record. No, you look at their temporary communications—their notes, their letters, their crime reports, advertisements, writings on sports and cultural events, even their menus. That's how you find out how they really lived. Their ephemera." He stopped, looking expectant.

"I see. Well, thanks, Mr. Ascher. That's really interesting." Lex turned toward the

door.

"No, wait—I'm going to give this to you, or I'll put it in a bag, give it to your dad to show you later. I've got school-related ephemera in this box, you see: report cards, school announcements, a class newsletter students put together, a teacher's lesson plan, an old history test, even a school lunch menu. You'll be able to see how school was for students in another age."

Lex turned around shyly. "Well, thank you, Mr. Ascher. That's very nice. I'll look

forward to it, okay? See you, okay?" He left.

Daniel didn't feel he should stay long, and put his plastic gloves on. But several hours passed, and still he couldn't make himself leave. He'd never seen Antonio so manie—going from one box of books and magazines to the next, pulling items out, prattling on about their rarity or other special qualities, laying them back down in some random location, then going on to the next. Nothing was ever returned to its original spot.

Here inside his home all traces of Antonio's arrogance had disappeared. He mumbled and fumbled with his things, nervous and always apologizing. "This place, this

place," he muttered, "it's like the inside of my head."

Now and then he would open a book, provide a few words of introduction, then shove

it into Daniel's hands within an explosion of flying dust and fluttering pages. After coughing through a couple of such incidents Daniel snapped on his breathing mask.

"I have one book in this house somewhere that I've been searching for for years. A first edition Where the Wild Things Are, very good condition at least, maybe a plus—I'd have to examine it again to know for sure. Do you know it?"

"Of course-I read it as a child, and it was one of Lex's favorites."

"A classic. Beautifully illustrated. And a first edition is one of the most valuable children's books you could find—tens of thousands of dollars in VG or better."

"Something like that, I would have thought you'd put it in a special place, Antonio."
"I did! I had it well-wrapped in brown paper, and I put it on top of a box right over

"I did! I had it well-wrapped in brown paper, and I put it on top of a box right over there—where I could always see it. I always try to put the really important stuff on top of everything else, so I'll always know where they are. Having all these things out in the open, it's as if they're physical extensions of my memory, but they don't go away on you at awkward moments."

"What happened to it?"

"I had a little, well, I call them 'book-a-lanches.'" He winked. "It started up on the second floor. Something shifted, or fell—I don't know—there was some kind of chain reaction, and then this wall of books and boxes and miscellaneous paper came rushing out of the top of the staircase there, as if the entire second floor had ruptured, books slapping and pounding down everywhere, and the loose papers and magazines making this whoosking sound like a heavy load of sand pouring over the railings, covering this floor here, then pushing over into the next rooms, upsetting my careful arrangements.

"My Sendak first edition was buried, moved, I don't know. That was at least six years ago and I haven't found it since. It's a shame—if I could sell that book I could solve most of my problems. I've got lots of books in here worth quite a bit of money. I just have to find them, then find someone who'll buy them. You know what they say, sometimes you don't know what you have, and sometimes you know what you have but you can't find it."

"What if it happens again?"

"Oh, I don't think it will. There was a leak in the roof that softened some boxes. I've been up there a couple of times since, stuffing plastic into the ceiling, and I've moved boxes away from that damp place on the floor. There are other things needing fixing that I can't get to—too many boxes in the way. I have two rooms upstairs, Daniel, that no longer exist for me—I can't get into them. But at least with this one leak I can still reach it to do something."

"Maybe you should get it properly fixed."

"Td like to, but I don't think anyone else could get up there without knocking over my book stacks. You have to put one foot on that bare spot, then lean against the railing for leverage while you stretch a few steps up, pulling on the rail to get yourself up and over."

"Antonio." Daniel searched for the right words. "You know you shouldn't have to do that."

that."

"Oh. I know. But the thing about repairmen, there are so many permits required now, inspections, they ask so many questions, and they always have to check your

records."

"I've wondered how you could keep a house like this, down here, so near the frames and everything else. The taxes alone."

"Daniel, I'm afraid I don't pay them."

Daniel opened one of the books lying by his knees. It was a study of steam power, with a number of speculations concerning possible future applications. The illustrations were wonderful. 'I didn't see how you could,' he said, without looking up.

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"No, certainly not now." Antonio said. "At first. I was only looking to give myself some time on the heating bill. I didn't need or want it toasty in here, but it was important to keep the pipes from freezing-a flood would have been disastrous-and I needed to have it warm enough in the house so that I wasn't tempted to use space heaters, which would have been equally disastrous."

"I'd be terrified of a fire in here, space heaters or not. I'm sure you've violated fire codes"

"I know, Daniel, I know—I've let it all just—well, it's completely out of hand, But my original intention was that I'd let myself have a break on the heating bill for just a few months. I'd volunteer, do charity work, to make up for it. There was a fellow at the Mall in those days-Stephen-who was a real computer whiz. He told me he'd get me that break. When I saw him a few days later, he said that they'd tightened things up a bit security-wise and the only way he could figure how to do it was to 'take my house off the books.'

"I really didn't know what that meant. He explained to me that he'd switched the building designation from residential to a city-owned utility structure equipped with running water and a heating plant. He said there were hundreds of such structures around the city. I wouldn't receive any more bills—the city would pay for it directly."

"What if someone came from the municipal authority to check out their property?" "Early on there'd be workers dropping by with trucks full of supplies and equipment.

Apparently the house was entered somewhere as 'municipal storage.' I told them it was part of the library system. Then they'd leave. Once or twice they'd express sympathy over my lack of cleaning and janitorial help. I told them if the library system had any more budget cuts we'd be burning books to heat the buildings. One fellow said that'd be no loss—the world was digital now. And like some kind of lowly collaborator I agreed with him! We all shared a mirthless laugh over it. No one's been back in years. By the time I thought I could pay something Stephen had disappeared. I didn't know what to do. I couldn't just come forward—they would take everything, all my books, Daniel. I keep expecting them to knock on my door. I keep expecting to be arrested."

"But in the meantime no electric or gas or water bills?"

"Or sewer, or property taxes, or anything else. I've been living here free. I suppose that makes me a criminal, doesn't it?"

Daniel thought about it, shaking his head. "I'm not going to judge. I can see how this would have happened. You just wanted to keep your home. And your books, your things."

"Daniel, if I lose my things there'll be nothing left of me."

"Maybe you could donate what you have here to the library system you've pretended to be a part of. Or one of the museums. You could visit your collection there—

it would be like housing it in a better place."

"They're full—they have tons of the same things I have in their basements. They've no room, and no one wants to see what they already have. Besides, how can I trust someone at a museum to have the same priorities I have about what should be kept? These things provide a clear record of who and what we were, how it was for us during that time. A whole world could be disappearing right from under us and most people wouldn't even realize it!"

"But Antonio, I spend my days, and some of my nights, analyzing the data stream, taking in this endless flow of events and implications. I think that's just what worlds

do. They disappear." There was a loud knock on the door, the splitting wood quaking in the jamb. Antonio jumped up, startled. "No one ever comes here," he said shakily. "You were the first

in such a long time." Daniel followed him into the entranceway. Antonio cracked open the door to a uniformed officer from the Health Department, "What do you want?"

"Mr. Ascher? Could you open the door, please? I need to speak to you."

When Antonio hesitated Daniel whispered, "You'd better do what he says."

He opened the door. The young man in uniform stood in front of a phalanx of workers in hazard suits and yellow visors. "We've received a notice of concern, sir. We're going to have to come in and look around."

Antonio looked up at Daniel. "Can they do this?"

"It's the Health Department. All they need is notice from a concerned party."

As the officer passed him Daniel could see that he was probably only a few years older than Lex. Tendrils of spongy scar tissue ran along his jaw and down his neck, indicating that he had been one of the very lucky ones from the last pandemic, "Who called?" Daniel asked him.

The officer paused, scanning the entrance hall, the rooms beyond. He turned and looked at Daniel appraisingly. "All I can tell you is it was a concerned recent visitor to the premises. And with good reason to call, I would say."

Daniel came home late and went straight into his office. He was still there when Lex knocked, then entered, "Are you okay, Dad?"

"I'm fine, I did use the mask, and I touched very little. It was just a long afternoon and evening,"

"How about Mister Ascher? Is he going to be okay?"

Daniel looked at his son, who gazed miserably back. "He'll be okay. I'll help him as best I can. And he'll end up in a better situation, I'm sure. Sooner or later, something had to give." He paused. "I think everybody did their best at what they felt they had to do. He put that educational ephemera for you in a bag, by the way. He didn't forget.

"Could you hold on to it for me for a while?"

Antonio never got back into his house, and the vast majority of his accumulation was disposed of A few items went to the central library, and Daniel made sure that Antonio got a couple of dozen vintage books returned from the Health Department after a thorough inspection, including a first edition copy of Where the Wild Things Are, in less than Good condition. The books looked very nice in Antonio's new apartment, which he described to Daniel as "where a retired professor from the last century might have stayed, a warm and well-lit place for rest, study, and contemplation of things long passed."

Daniel never told Antonio about his son's art project. A few months after Antonio had to leave his house Daniel was passing by Lex's room-uncharacteristically the door had been left open. Daniel walked inside, and was reminded again how each new generation will decide on its own what is important, what must be saved, and what will be thrown away.

A reflection inside the still whiteness of the almost barren room caught his attention, and he went to the wall where a large construction had been mounted.

It was the flatware from the People's Mall, stacked and layered and overlapped to make a face: juxtaposed patterns creating curls in the hair, the nose defined by the edge of a spoon, the flatness of knives making planes and shadows, fork tines crossed in intricate cross-hatching. It was evident how his son had weathered the pieces individually, scratching the metal and—a first for this artist—using paints and chemical washes to dull, highlight, and color to create age, the wearing away of decades, and the first symptoms of disease. But also character.

If he took a step back, this was obviously a portrait of the book dealer Antonio Ascher, in all his seriousness, his tendency toward annoyance, and a sadness of long residency. But merely a step to the side made the image of his old friend disappear,

and only these cast away objects remained. O

Ephemera

Ken Liu has worked as a programmer and a lawyer. He lives in the Greater Boston area with his wife, artist Lisa Tang Liu, and their daughter. More about Ken can be found at http://kenliu.name. The author's stories have appeared in F&SF, Strange Horizons, Lightspeed, and Clarkesworld, among other places. His first story for us draws inspiration from pure mathematics and . . .

# THE COUNTABLE

#### Ken Liu

his is what most people would consider a rational moment. David thought.

The interrogation room looked the way it did in TV shows: grey everywhere, bare except for the table and folding chairs, harsh, bright fluorescent lights. But on TV they never mentioned the smell of antiseptic floor wash, trying but failing to cover up the lingering odor of all the desperate, sweaty bodies that have passed through the room.

The lady lawyer on the other side of the table was talking to his mother, who was sitting next to him and crying softly. His mother probably thought what they were discussing was very important and the lawyer's advice sensible, but David wasn't terribly interested in what she had to say. From time to time, bits of their conversation fell into his awareness, and he let them drift along, like leaves on a pond.

... psychological evaluation ... keep him in the juvenile system ...

He didn't look at the lawyer's face. He seldom found anything useful in people's face. Instead, he was interested in the buttons on her blue blazer. There were three large buttons, all black. The top and bottom ones were round, the middle one a square.

... a little odd ... quiet, shy, gentle ...

He was not anxious. He hadn't been afraid when the sirens grew louder and louder and his mother opened the front door and the flashing lights from the beacons spilled into the living room, where he was sitting on the couch, waiting. His mother had been terrified and confused, and the baby, sensing her anxiety, had begun to cry again. He had cradled the baby, and tried to explain to her that there was no reason to cry. Most moments were not rational, he whispered to her, and this moment was no different.

... undiagnosed ... high-functioning ... pattern of abuse ...

The designer had probably intended the square button to be the same size as the circular ones. That's an old problem: squaring the circle. He wondered if the design was meant as a joke, but doubted it. Other people's humor had always confused him. Perhaps the designer was interested in the problem the same way he was, as a statement about the beauty of math glimpsed through a veil.

... petition ... pretrial hearing ... justifiable defense ... expert witnesses ...

It was not possible to square the circle, of course. To do that you needed the square root of pi. But pi was not rational. It was not even merely irrational. It was not constructible. It was not algebraic, so it was incapable of serving as the root of some polynomial snaking about the Cartesian plane. It was transcendental. Yet for thousands of years people pursued the fool's errand, trying to achieve the impossible.

He was tired of pursuing the impossible, of trying to make the world rational.

Almost all of the numbers in the world were transcendental, just like pi, but most people paid no attention to them. They were preoccupied with the rational, though they were merely scattered like infinitesimal islands in the transcendental sea.

His mind was drifting away from the present, and he let it. These supposedly rational moments held little interest for him. They made up such a small part of life.

As long as he could remember, he had trouble with other people. He thought he understood what they said, but it often turned out that he hadn't, not really. Words sometimes meant the opposite of what the dictionary said they meant. People got angry with him, seemingly for no reason, even though he was listening with all his attention and speaking as carefully as he could. He could not make himself belong. He was angry and frustrated that the world did not seem to be rational, did not make sense to him the way it did to others. And then he would get into fights that he could not win, because he did not understand why he was fighting.

"What does that mean?" Betty asked. "You're saying something is wrong with David?" David felt his mother's hand tightening around his. He was glad that the

principal's words did not make sense to his mother either.

"Well, nothing wrong. Not exactly. David has demonstrated difficulty in establishing empathy with his peers. He takes everything so literally that it's—we just think he should be evaluated properly."

"Nothing is wrong with him," Betty said, "He's shy, That's all. His father is dead,

That will mess anyone up for a bit."

Gradually it dawned on him that people carried on two conversations at once: one with words, the other with seemingly inconsequential signals—the overtones in the voice, the angle of a tilt of the head, the direction of an eye glance, the crossing of legs, the fluttering of fingers, the pursing of lips and the wrinkling of the nose. He was deaf to this language beneath the language, oblivious to the rules that everyone took for granted.

Painstakingly, he formulated explicit axioms and deduced complex theorems about this other, unspoken language. It took him years of trial and error to figure out a system of rules that seemed to work. Following them, he did not draw attention to himself. He could appear to be trying, but not too hard. This made middle school a safe

place, for the most part.

Ideally, he would have liked to get B's in everything so that he would fade into the anonymity of the crowd, but that was very difficult in math. He had always liked math for its certainty, its rationality, its precise sense of right and wrong. He could not bear to make a deliberate error on a math test. It seemed a betrayal. The best he could do was to error the answers to a few problems on each test after he worked them out.

"Please stay after class, David," Ms. Wu said as the bell rang. Some of the students looked back at him briefly, wondering what kind of trouble he was in. But the room

quickly emptied, leaving David alone at his desk.

Ms. Wu was here just for the semester as a student teacher. Young, pretty, the students liked her. She wasn't yet too cynical to be curious about her students.

She walked over to his desk and put his latest test in front of him. "You had the right answers on the last page, but you erased them. Why?"

The Countable 59

David examined the paper. It was empty. He wondered how she knew. He was always careful to write lightly and erase vigorously, leaving as little impression behind

as possible, the way he did everything in life.

"When I walked around during the test, I saw that you had written down the right answers. You were done long before the rest of the class. Then you just sat there, staring into space until half the class turned their tests in. I saw you erasing right before you came up."

David said nothing. He liked the way Ms. Wu's voice washed over him. He imagined it as the graph of a polynomial, smoothly rising up and then falling down. The

pauses in her speech were the roots, where the graph crossed the x-axis.

"It's not a bad thing to be interested in something, you know." She put her hand on his shoulder. She smelled of fresh laundry, of summer flowers. "To be good at something."

It had been a long time since anyone paid attention to him without something bad happening. He didn't even know he missed it.

David had one picture of his father, taken on the day his father was graduating from high school. The cap and gown seemed a few sizes too large on his slight frame. His fine features were still boyish, the bridge of the nose thin and delicate. He was not smiling into the camera. His eyes seemed frightened, focused on something infinitely far away. Perhaps he was thinking about David, then still barely visible under Betty's dress. Or perhaps he was seeing a vision of the truck with failed brakes that would mow him down as he walked home from his job as a filing clerk at night five vears later.

Those eyes were blue, with long lashes, just like David's.

Seeing those eyes always enraged Jack, whether he was sober or not. "You're a goddamn wuss and a sneak, just like your dad."

So David knew not to look Jack in the eye, and he always tried to look away when

Jack was around. Some nights that worked. But not tonight.

"Look at me," Jack said. They were having dinner, Betty was feeding the baby on the couch. It was just the two of them at the table. The TV blared in the corner with the evening news.

"I feed you, put clothes on you, and keep a roof over your head. The least I can ask

for is some respect. Sit up and look at me when I'm talking to you."

David did as he asked. He tried to keep his face expressionless and his eyes focused on something beyond his stepfather. He counted the seconds until Jack would explode. In a way he was relieved. The worst part about each night was the anticipation, the uncertainty of not knowing what sort of mood Jack would be in when he got home and what he would do. But now the wait was over. All he had to do was to endure.

"Don't you dare sneer at me, you little shit. You're asking for a beating."

Betty took the baby into the bedroom. She always left when Jack's voice took on

that particular tone.

sharp teeth.

David wished that he had his stepfather's height, his thick arms, his fat knuckles and flat nose, a nose that could take a punch. He wished that he had claws and

"Georg Cantor was the first man to think rigorously about infinity," Ms. Wu said to the room.

The Math Club was David's secret. He took a risk in being here. Joining any club revealed something about yourself, made you vulnerable if your mission was to fade away, to leave no trace. He could imagine how Jack would taunt him if he found out.

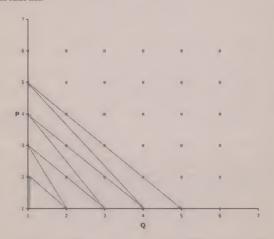
"You think you're smart, don't you?" He imagined Jack's leer, wet, yellow teeth, and alcohol on his breath. "Just like your dad. Look how far his smarts got him when he couldn't keep his dick in his pants."

"He thought about the size of infinity," Ms. Wu said. "It's difficult for human beings to understand infinity, but Cantor made it possible to glimpse it and hold it, if only for a second, in your mind.

"Which do you think is bigger: the infinite set of all positive rational numbers, or the infinite set of all natural numbers?

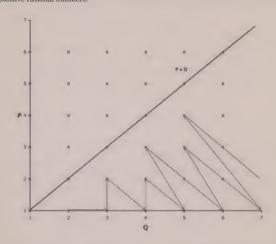
"It might be natural to think that there are many more positive rational numbers than natural numbers. After all, there are an infinite number of rational numbers just between 0 and 1. And there are infinitely many intervals between each successive pair of natural numbers. Infinity times infinity must be bigger than just infinity alone.

"Cantor's great insight was that this was not true. There is a way to map each natural number to a positive rational number such that you can see that the sets are the same size."



"A positive rational number takes the form p/q, where p and q are both natural numbers. By following the arrows in the diagram, we can be sure that every positive rational number will eventually be enumerated in our zig-zag path across the plane (skipping over any repeats): first, 1/1, second, 2/1, third, 1/2, fourth, 3/1, fifth, 1/3, sixth, 4/1, seventh, 3/2, eighth, 2/3, and ad infinitum. By counting, we map each natural number to a positive rational. Even though it seems that the universe of rational numbers would be so much bigger than the universe of natural numbers, it turns out that they are the same size.

"But Cantor's argument is even stranger than that. You can show, by the same method, that there are as many rational numbers between 0 and 1 as there are all positive rational numbers."



"Just by changing our path slightly so that we always stay below the line p=q, we'll be able to enumerate all the rational numbers between 0 and 1. Since there's a one-to-one mapping, or a bijection, between the naturals and the positive rationals, and a bijection between the naturals and the rationals between 0 and 1, we know that all three sets are the same size, or have the same cardinality. The cardinal number of the set of all natural numbers is called aleph-null, after the Hebrew letter aleph."

#### $\aleph_0$

"Aleph-null confounds our intuitions. You can see that all the rational numbers between 0 and 1 take up half of the plane of all rational numbers in the picture above, with all the other rational numbers in the other half, and yet one half is not bigger than the other, or the whole plane. Divide infinity in half, and you still have infinity. Turn the number line into a plane, multiply infinity by infinity, and you end up still with the same size of infinity.

"It seems to say that a part can be just as large as the whole. And it is possible to

map the whole infinite line of rational numbers into the seemingly finite segment between 0 and 1. In every grain of sand is the universe."

One of the few memories that David had of his father was a trip they had all taken to Myrtle Beach. David could not even be sure that it really happened; he was so young back then.

He remembered digging in the sand with a plastic shovel—red, yellow? Well, in this particular moment the shovel was blue, like the blazer the lady lawyer was wearing. Betty was sunbathing to the side, and his father was helping him by moving the sand that he dug up into a plastic bucket.

The sun was hot but not unpleasant. The voices of the people on the beach faded into an indistinct murmur. One shovelful.

He was mesmerized by the smooth, hypnotic way sand moved: solid particles that flowed like a liquid, falling, sliding, tumbling from the blue plastic shovel into the bucket. Two showelfuls.

The particles were so fine, like flour, like salt. He wondered how many grains of sand had tumbled from his shovel between the time he began this thought and now, right now. Three shovelfuls. If he stared really hard, could he see the individual grains? Four shovelfuls. He held his breath.

"You're counting?" His father asked.

He nodded. The sounds and sights of the world flooded back into his awareness. He gasped, like a swimmer coming up for air.

"It will take a long time to count all the sand on this beach."

"How long?"

"Longer than it took you to count the triangles on my towel," Betty said. He felt her hand, cool and smooth, lightly caressing his back. He relaxed his back. It was a nice feeling.

His father looked at him, and he stared back. It was an intense stare that others would have found off-putting, but his father smiled. "It would take until infinity, David"

"What's infinity?"

"It's beyond the time that you and I have. Let me tell you something the Chinese philosopher Zhuangzi once said: if a man can live a hundred years, that's a pretty long life. But a life is filled with sickness, death, sorrow, and loss, so that in a month of days you might have just four or five when you laughed out loud. Space and time are infinite, but our lives are finite. To experience the infinite with the finite, we should just count those transcendental moments, those moments of joy."

Betty's hands continued to stroke his back, and he saw that his father was no

longer looking at him, but at his mother.

This is one of those moments, he decided.

"You keep on fucking around with those numbers and books, and you'll end up like those criminals on Wall Street," Jack said. "Nobody in this country wants to work honestly with his hands any more. That's why the Chinese are eating our lunch."

honestly with his hands any more. That's why the Chinese are eating our lunch."

David took his books and notes and retreated to the bedroom that he shared with the baby. She was taking a nap, and David stared at her face, so peaceful, oblivious to

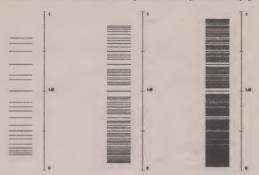
the sounds of the TV blasting from the living room.

Perhaps the world did not make sense because he was not counting properly. Maybe he was out of sync with the world.

David sat down at the desk. He drew a vertical line down the page, labeled the bottom 0 and the top 1. Then he tried to map out the sequence of rational numbers between 0 and 1 along the zigzagging path of the Cantor pairing function traveling in

The Countable 6

the Cartesian plane that Ms. Wu had drawn on the board at school. He drew a short horizontal line for each rational in the sequence. Gradually, he filled the page.



The lines accumulated one after another, reaching high on each zig up the vertical axis, before methodically stepping down and filling in the blank space left behind on each falling zag to the horizontal axis.

There are an infinite number of moments in a finite life. Who says that you must

stay in the present, and experience them in order?

The past was not the past. The same moments would be experienced again and again, and each time something new would be added. Given enough time, the blanks would be filled with the rational. The lines would complete a picture. The world made sense. All you had to do was wait.

Parts of our brain, consisting of regions in the frontal, parietal, and medial temporal lobes, are active only when we are not presently engaged in a cognitive task. When we are computing the sum of 12,391,424 and 38,234,231, figuring out how to get from home to the next job interview, or reading the latest mutual fund prospectus, these regions of the brain go dark on an MRI brain scan. But when we are not actively thinking about anything, the dark network of the brain lights up.

A much younger David flipped the page. Betty was out with Jack, and he was locked alone in the house. She had left him with a warning that he shouldn't answer the phone or the door or let anyone know that he was home. He did not find this strange. For all he knew, this was how all eight-year-old boys spent their evenings when their mothers went on dates. He enjoyed the company of the boxes of books left behind by his father far more than the company of other people, or Jack.

He did not like the novels much, but forced himself to plod through them slowly, reading them as textbooks about social and emotional rules that he could not fathom. He preferred the books about math, with their beautiful equations, fantastic graphs, and strange symbols that he could not pronounce.

And then there were the books about science, which he devoured the way other children read fairytales. Like this one:

It turns out that the dark network is where our species practices its most amazing power, a power more uniquely human than language, than math, than our ability to go to war and compose poetry. The dark network is where we engage in time travel.

Jack had begun to come over more frequently and sometimes stayed nights. David cataloged and enumerated the changes in his mother carefully, analyzing them as clues to what he could not intuit: the way his mother giggled, like a young girl in movies; the dresses that he had never seen her wear; the way more and more of Jack's things accumulated in their apartment.

The brain's perception of time offers up one mystery after another. There is no easy answer to how the brain perceives the passage of time, the steady conversion of the future to the present, and the present to the past. Is there a cluster of neurons that pulse steadily, like a metronome or the clock signal in a modern integrated circuit? Or is it the analog delay of activation potentials cascading across the neurons that tells us time is passing? Or perhaps time is measured by the chemical diffusion of neurotransmitters, and maybe that explains why time slows down when we are under the influence of drugs like cocaine, which boosts dopamine.

The key rattled in the door, and Betty and Jack stumbled in. David paused in his reading and looked up. A momentary cool breeze was followed by the smell of cigarettes, sweat, and alcohol filling the hot, stale air of the apartment. Jack plopped down on the couch and flicked on the TV. Betty came back from the kitchen with a half-filled glass, and as she approached Jack, she laughed, lost her balance, and tumbled into Jack's lap. The drink, miraculously, stayed unspilled. She kicked off her heels and put an arm around his neck.

"The boy is leaving books everywhere," Jack said. He surveyed the piles all over the floor. "You can hardly walk around without kicking over a stack. What's with all

the books anyway? I never see you read anything."

In any event, research seems to suggest that we do not so much live in the present as an illusion of the present. Although your eyes may perceive your foot striking the ground a fraction of a second before the nerve impulse carrying the sensation travels from your foot to your brain, you do not perceive a delay. The brain sits in the cranium in darkness, and signals from around the body are integrated into a sense of now only after the slowest signal has arrived, which suggests that our conscious awareness of the present is delayed, a bit like a "live" broadcast. We may be like train passengers in rear facing seats, always perceiving the "present" only when it has become the recent past.

"His father was a big reader," Betty said. "He did real well in school. Got into UVA." Realizing that she was killing the mood, Betty stopped. She tried to kiss Jack.

"Then he got into you," Jack said, moving his lips away from hers. A nasty tone had crept into his voice. He caressed her breasts through her dress. Betty blushed and reached up to stop him. Jack slapped her hands aside and laughed.

"Stay still. I'm showing the boy what you can't teach him."

David turned his eyes away. He was not good at reading faces and could not explain what he saw in his mother's face at that moment. He felt it was like looking at her when she was undressed.

Not only is our sense of the present illusory, but we do not even spend most of our time in it. The dark network is where the brain takes its trips down memory lane and simulates the future. We relive our experiences to draw out lessons and play out possibilities to plan for what is to come. We imagine ourselves in other times, and in the process we live out many lifetimes in one.

"We need to clean this pigsty up," Jack said. "Too much stuff you don't need any

The Countable 65

Unlike a computer, which can retrieve data from long-term memory without alteration and process it in short-term memory, the brain's memories, patterns of activation potentials, are processed in-place, and are thus altered each time we remember. We cannot step into the same place in Heraclitus's river twice not only because we cannot physically go back in time, but because even our memory of each moment remains ever changing.

"The boy sits there and reads all day. It's not natural. Look at him. Not a peep out of him all this time we've been back. He's creeping me out. Hey, I'm talking to you!"

He threw the remote at David. It thudded against his chest and clattered to the ground. David flinched and looked up. Their eyes met. After a moment, Jack swore, and he began to push Betty off.

Jack he found most baffling of all. He could not figure out the rules needed to predict his outbursts.

In the end Betty coaxed Jack into coming with her into the bedroom. David was left alone in the living room. Slowly, he uncurled himself, ignored the pain, and cradled the book in his lan.

The dark network is the default mode for our brain. It is the state that our brain drifts toward whenever we are not occupied by some pressing concern in the present. Whenever we are not thinking about anything in particular, we drift in time, cast of from the anchor of the present to wander over the infinite paths of our lives, those taken, untaken, and yet to be mapped.

The brain's capacity to manipulate time remains mostly unexplored. If simultaneity of the senses is largely an illusion, could our sense of the linearity of experience similarly be constructed? We seem to be skipping over the river of time, aware of the present only from time to time by an act of will. If trauma or disease affected the relevant regions of the brain, could we cut experience into ever-finer slices, experience them out of order, or stay forever away from the present, lost in time?

The next day, Jack and Betty packed up all the books and brought them to the

dumpster.

"You can't read those books anyway," Betty said, trying to comfort David. "I don't even understand them. We need to move on with our lives."

"You might think," Ms. Wu said, "based on what we studied last time, that all infinities are aleph-null, but this is not true. The countably infinite is only the smallest of the infinities.

"The set of all real numbers, for example, is not countably infinite. It is far bigger. Cantor found a way to prove this.

"Suppose that the real numbers are countably infinite. Then there must be a bijection from the naturals to the reals. The reals must be capable of being counted. Since every real number can be written as an endless sequence of decimal digits just pad out the end with repeating 0's if they don't go on endlessly—we can imagine that the enumeration will look something like this:

> ... 1 2 3 . 0 1 2 3 4 5 ... ... 1 2 4 . 0 2 3 4 5 6 ... ... 1 2 5 . 0 3 4 5 6 7 8 ... ... 1 2 6 . 0 4 5 6 7 8 9 ... ... 1 2 7 . 0 5 6 7 8 9 ... ... 1 2 8 . 0 6 7 8 9 0 ...

"Remember, this is supposed to be an enumeration of all the real numbers. But we can easily construct a new real number that cannot be on this list. Just take the first digit in the first number on the list and write down a new digit that's different. And take the second digit in the second number on the list and write down a new digit that's different. Continue this diagonal movement down the list.

"When you put the new digits together, you have a new real number. But this is a real number that does not exist on the list anywhere. It differs from the first number on the list in the first digit, from the second number on the list in the second digit,

from the third number on the list in the third digit, and so on.

234 118

"You can construct an infinite many such real numbers that cannot be found on the list just by drawing new diagonals and flipping to new digits. There is no bijection from the naturals to the reals. No matter how you try to arrange the reals, more of them will slip through your fingers. The real numbers are infinite, but it's a much bigger kind of infinity than aleph-null. There are so many more real numbers than the natural numbers that the real numbers cannot be counted. We call the cardinality of this uncountable infinity beth-one."

 $\beth_1$ 

"But even beth-one is still only a very small transfinite number. There are many more numbers that are much bigger, a true infinity of infinities. We'll get to those in the next few days. When Cantor first wrote about their existence, some theologians were deeply threatened by his work. They thought Cantor was challenging the absolute infinity and transcendence of God.

"But even just knowing beth-one is bigger than aleph-null allows you to see some wonderful things. For example, we know that the rational numbers are countable and have cardinality aleph-null. But the real numbers are the union of the set of rationals and the set of irrationals, and we know that the real numbers have cardinality beth-one."

$$|\mathbb{R}| = |\mathbb{Q}| + |\mathbb{Q}|$$
$$\beth_1 = \aleph_0 + ???$$

"Therefore, the set of irrational numbers must have cardinality greater than aleph-null, since we know that doubling aleph-null only gets you to aleph-null, not beth-one. In fact, we have proven that there must be uncountably many—or beth-one—irrationals.

"In other words, there are many, many more irrational numbers than rational numbers. Almost all real numbers are irrational. And by a similar argument, you can prove that almost all irrational numbers are transcendental and not algebraic, not findable as the root of a polynomial with integer coefficients. Even though so few transcendentals seem to touch our daily life—like pi and e—they make up most of the number line. Most of the math you've been studying in school all these years has been focused on just tiny slices of the continuum."

The textbook from Ms. Wu included poetry quotations at the beginning of the chapter. David did not usually like poetry, which seemed to be composed of the same language beneath the language that he was not attuned to, with metaphors and figures that confused him. But these were different. These seemed to say how he felt.

Ah, awful weight! Infinity
Pressed down upon the finite Me!
—Edna St. Vincent Millay, Renascence

I am large, I contain multitudes.
—Walt Whitman, Song of Myself

The lines he had been drawing would never complete the number line; he understream that now. The irrational space between them was infinite. The picture would never cohere and make sense. Life could not be reduced to its rational moments.

But the rational moments were not worth counting. There was nothing wrong with him. He finally understood. Isn't it wonderful to know, to really know, that the irrational is the rule, and not the exception, and to know further that most of that is transcendental, even if we are aware of so few of them? Life did not make sense. It did not need to. Why were the theologians afraid of Cantor? This was a truth to be celebrated. It is only the transcendentally happy moments that should be counted.

A scream from Betty on the other side of the bedroom door interrupted him, followed by the cries of the baby. David was amazed that such a small body could be the source of such loud cries, the full-throated demand for justice, for sense, so fearless and sad at the same time. When the baby stopped to take a breath, he could hear Betty's muffled voice pleading indistinctly. Then came the sound of plates smashing on the floor.

He opened the door.

He could tell that Jack was only a little drunk. He stood steady on his feet. Betty's long, smooth hair, of which she was very proud, was wrapped around Jack's hand and held in a fist. She was on her knees, her hands pulling at his hand holding her hair. She had put the baby down on the couch, where she flailed her limbs and her face was turning red from crying and the lack of air.

Maybe Jack was fired from his job again. Maybe he got into an argument with the Vietnamese grocers down the block. Maybe he didn't like Betty's dress when he got

home. Maybe the baby was crying when he didn't want to hear her.

"You dirty slut," he said, quietly, calmly. "I'm going to teach you a lesson. Who was he?"

Betty's voice came out in wordless sobs and denials. Keeping his hold on her hair, he began to punch her in the stomach and kidneys.

He isn't hitting her in the face, David thought. That's rational. Otherwise neigh-

Ken Liu

bors might ask questions.

Betty continued to apologize, to try to explain and make sense of this world, to herself and to lack

David could not speak. He felt a dull, hot force rising inside himself, pushing on his throat and choking him. He reached out to grab Jack's hand, and Jack threw him to the ground without looking at him.

The cries of the baby grew louder. A white hot pain throbbed inside David's head. He had never felt this angry and helpless. He could not do anything to stop the pain and terror; all he could do was manipulate symbols in his mind. He was useless. He has demonstrated difficulty in establishing empathy. He takes everything so literally.

Betty's pleas and the baby's cries faded into the throbbing, pounding pain in his head. Time seemed to slow down. His mind began to drift, to leave the present.

One, Myrtle Beach.

He looked at the door leading to the kitchen. He got up.

Two, Ms. Wu's hand on his shoulder.

He looked down at his hand, and was surprised to see that he was holding the chef's knife. Like train passengers in rear-facing seats. The fluorescent light reflected from its cold blade.

Three, "Nothing is wrong with him. He's shy. That's all."

Betty was curled into a ball on the ground. The light was failing in the apartment. From the back, Jack's figure was implacable, a dark heaving mass that slowly lifted a fist into the air. The baby screamed again.

Four, the diagonal line of digits stretching into infinity.

He was on the floor again. He looked down to see that there was blood on his hand. The knife was on the ground. Jack sat quietly on the floor, his body leaning against the couch without moving as blood pooled around him. Betty crawled toward David.

Five, this moment. Right now.

#### Author's Note:

Ms. Wi's presentation of Cantor's diagonal argument glosses over the point that any real number's decimal representation as an infinite series of digits is ambiguous. That is, a number such as 2 can be written as either 1.9999... or 2.0000..., which raises the possibility that the new number constructed via the diagonal argument might simply be the alternate form of another number that is already enumerated in the list. This can be addressed by requiring that the real numbers in the list adhere to the ... 9999 ... form, and that the constructed number not use the digit 0.

The section on brain and the perception of time draws from the research summaries given by David Eagleman and Daniel Gilbert:

David Eagleman, "Brain Time," Edge: the Third Culture, June 24, 2009 (available at http://www.edge.org/3rd\_culture/eagleman09/eagleman09\_index.html)

Daniel Gilbert, "The Brain: Time Travel in the Brain," Time, January 19, 2007 (available at http://www.time.com/time/magazine/article/0,9171,1580364,00.html)

The Countable 6

## "RUN," BAKRI SAYS

#### Ferrett Steinmetz

As a die-hard gaming nerd, Ferrett Steinmetz's previous Asimov's stories have been heavily influenced by gaming. His first story "Camera Obscured" (September 2009) was inspired by Rock Band's leaderboards and "Under the Thumb of the Brain Patrol" (October/November 2010) was the result of a D&D game gone wrong. His latest story may be sparked by videogame speedruns gone terribly wrong, but it takes that problem to a much deeper and darker level. Ferrett lives in

Cleveland with his beautiful wife and blogs at The
Watchtower of Destruction

<a href="http://theferrett.livejournal.com">http://theferrett.livejournal.com</a>>.

just want to know where my brother is," Irena yells at the guards. The English words are thick and slow on her tongue, like honey. She holds her hands high in the air; the gun she's tucked into the back of her pants jabs at her spine.

She doesn't want to kill the soldiers on this iteration; she's never killed anyone before, and doesn't want to start. But unless she can get poor, weak Sammi out of that prison in the next fifty/infinity minutes, they'll start in on him with the rubber hoses and he'll tell them what he's done. And though she loves her brother with all her

heart, it would be a blessing then if the Americans beat him to death.

The guards are still at the far end of the street, just before the tangle of barbed wire that bars the prison entrance. Irena stands still, lets them approach her, guns out. One is a black man, the skin around his eyes creased with a habitual expression of distrust; a fringe of white hair and an unwavering aim marks him as a career man. The other is a younger man, squinting nervously, his babyfat face the picture of every new American soldier. Above them, a third soldier looks down from his wooden tower, reaching for the radio at his belt.

She hopes she won't get to know them. This will be easier if all they do is point

guns and yell. It'll be just like Sammi's stupid videogames.

"My brother," she repeats, her mouth dry; it hurts to raise her arms after the rough surgery Bakri's done with an X-acto knife and some fishing line. 'His name is Sammi Darazhmeh. You rounded him up last night, with many other men. He is—

Their gazes catch on the rough iron manacle dangling from her left wrist. She looks up, remembers that Bakri installed a button on the tether so she could rewind, realizes the front of her cornflower-blue abaya is splotched with blood from her oozing stitches.

"Wait." She backs away. "I'm not--"

The younger soldier yells, "She's got something!" They open fire. Something tugs at her neck, parting flesh; another crack, and she swallows her own teeth. She tries to talk but her windpipe whistles; her body betrays her, refusing to move as she crumples to the ground, willing herself to keep going. Nothing listens.

This is death, she thinks. This is what it's like to die.

"Run," Bakri says, and Irena is standing in an alleyway instead of dying on the street—gravity's all wrong and her muscles follow her orders again. Her arms and legs flail and she topples face-first into a pile of rotting lettuce. The gun Bakri has just pressed into her hands falls to the ground.

Dying was worse than she'd thought. Her mind's still jangled with the shock, from feeling all her nerves shrieking in panic as she died . . . She shudders in the garbage,

trying to regain strength.

Bakri picks her up. "What is your goal?" he barks, keeping his voice low so the

shoppers at the other end of the grocery store's alleyway don't hear.

Why is he asking me that? she thinks, then remembers: all the others went insane. She wouldn't even be here if Farhouz hadn't slaughtered seventeen soldiers inside the Green Zone.

It takes an effort to speak. "To-to rescue Sammi."

"Good," The tension drains from his face. He looks so relieved that Irena thinks he

might burst into tears. "What iteration? You did iterate, right?"

"Two," she says numbly, understanding what his relief means: he didn't know. He'd sent her off to be shot, unsure whether he'd linked her brother's technology to the heart monitor he'd stuck in the gash in her chest. It was supposed to trigger a rewind when her heart stopped. If he'd misconfigured it, Irena's consciousness would have died in an immutable present.

Irena looks back at The Save Point, stashed underneath a pile of crates, a contraption that's totally Sammi; it's several old Xboxes wired together with rusted antenna and whirligig copper cups, the humming circuitry glowing green. It looks like trash, except for the bright red "<<" arrows Sammi spraypainted onto the side. That, and the fact that it just hauled her consciousness back through time.

Bakri gives her an unapologetic nod: yes, I sent you off to die. "We can't let the

Americans get it.'

"No," she agrees, then runs out to the street, headed four blocks down to where the prison is. She closes her hands into fists so her fingers don't tremble.

She's been shot. She will be shot again, and again, until she rescues Sammi.

"Run," Bakri says, and this time she pushes the tether up around her arm—it's wide enough to slide up over her bicep, underneath her abaya's billowing sleeves—but the guards are panicky. They shoot her when she crosses the chain they've strung across the road to the prison entrance.

God damn you, she thinks. I'm not like Sammi. I don't want to kill you. But they're terrified of what Fahrouz did. He cut the throats of seventeen men before anyone heard him; it's why the Americans rounded up anyone who had any connection to the resistance last night, including her brother. They think Fahrouz was a new breed of super-soldier; they believe any brown face is capable of killing them. But she's just a girl who's never fired a gun, not even in Sammi's stupid videogames.

girl who's never fired a gun, not even in Sammi's stupid videogame: "Run." Bakri savs.

She tries climbing the high fence around the prison, but the barbed wire rips at her hands and the guard on the wooden sniper platform scans the prison every sixty seconds. He is inhuman, never tiring (at least in the fifty minutes she has before The

Save Point's power fades and she's pulled back to the alleyway)—and his aim is infallible. He introduces her to the horror of her first headshot; when she reappears in the alleyway, her brain patterns are so scrambled she has a seizure.

"Run," Bakri says.

She tries different approaches; she smears her face with blood, yelling there's a shooter in the marketplace. She weeps, approaching as a mourner. She sneaks from the shadows. Anything to avoid killing them. They yell that they have orders to open fire on anyone crossing the line. Though they wince when they pull the trigger, open fire they do.

"Run," Bakri says.

She tries prostrating herself upon the ground. As she kneels to place her hands on the concrete, the tether slides down her arm. The sudden movement causes them to fire.

"Run," Bakri says.

She's getting good at dying, now. The trick is to go slack, so you don't flail upon waking when you rewind. Yet surrendering to her body's shutdown is like dying before she's dead. And every time she returns, Bakri's grabbing her with his sweaty palms, demanding to know her goal.

"Stop it." She slaps his hands away. She shakes the iron bracelet at him; things inside it rattle. "You gave me a tether that looks like a damn bomb. No wonder they're shooting me! You have to restart it.—Sammi made a tether you could bite down on, so

no one could see-"

"That one broke when they shot Fahrouz in the head," Bakri snaps back. "You're lucky I could build any tether at all. You're lucky I'm here. Everyone else thinks this machine just drives men mad. They want Sammi to die."

The stitches from where Bakri implanted the heart monitor never stop hurting, her gashes always bleeding in the same way. She's always thirsty, her body can never relieve itself as she loops through the same time again and again. She gorges herself on stolen drinks from the marketplace between the alleyway and the prison—but then she's back with Bakri, dryness tickling the back of her throat. Why didn't she drink before Bakri started this? Why didn't anyone tell her to start the Save Point when she was lying down, so she wouldn't keep falling over?

"Run," Bakri says. She wishes she could tell Sammi about her improvements. All

this hard-earned knowledge, lost.

It becomes a game of inches. The babyfaced soldier is hair-trigger, ripping her body to shreds the moment anything unexpected happens—oh, Fahrouz, you put the fear of God into these Americans; you were only supposed to steal a laptop—but he's also a softie, arguing with his older compatriot if she's crying. The older black man is hard-edged, by the book; he yells that he will shoot if she comes two steps closer, and he always does.

Sometimes the babyfaced one vomits as she's dying. The soldier on the wooden sniper platform always looks down like a distant God, crossing himself as she bleeds

out. Then Bakri, asking her what her goal is.

"Run," Bakri says.

She doesn't always die. She can usually get to the button on her wrist. But dying never gets easier. Her mind understands what will happen; her body cannot. No matter how she steels herself for the bullet, her body overwhelms conscious thought with dumb animal terror.

"Run," Bakri says.

She learns to optimize. If she's crying this way to tug on the younger one's emotions, and creeps that way when the older soldier's busy bickering with the young one that they can't help, then how far can she get before they fire? There's a wet newspaper flattened against the street, then a tire track a little further, then a rusty coil of barbed wire next to the entrance. She can get past the newspaper consistently, nearly getting to the tire track before they blow her apart; what can she say that will get her to the barbed wire?

"Run," Bakri says.

Their conversations become monotonous variants: Sir, she needs help. We have orders, soldier. Nothing she can do will make them discuss the weather, or tell her
what cell her brother's in, or even smile. Just the same recycled topics, chopped into
different words. It reminds her of home, listening to Sammi outwit AI guards and
their recycled vocabulary, back when Sammi built bombs and played videogames.

"Run," Bakri says. Now she can always hit the tire track.

Sammi always played videogames. He hated going outside. He got political at thirteen after Mother was blown apart by a smart missile programmed with the wrong coordinates. Even then, Sammi never placed the bombs. He just handed people boxes of death, with instructions where to place them. Irena remembers how he'd tinker with his explosives and then play first-person shooters to relax, as though they were aspects of the same thing.

"Run," Bakri says.

Sammi was a genius with wires. When the Americans jammed the cell phones he used to activate his bombs, Sammi set the bombs to go off fifteen minutes after the cell phone signal cut out. And when the Americans got a jamming device that fuzzed the signal but didn't kill it, he switched to proximity sensors. Then he started working on other sensors—sensors that predicted when people would walk by, sensors that sent signals back to twenty seconds before they were disconnected.

By the time he was seventeen, bombs bored him. He started other experiments. "Run," Bakri says, Now she's consistently past the tire track, her fingers halfway

to the barbed wire.

She'd gotten janitorial jobs for Sammi's volunteers, after they'd finished their trial runs with The Save Point. They made lousy employees. They knocked over cups of coffee and stared at the spill for minutes, then sobbed in relief.

Irena understands why, now. They were grateful the spill stayed. Something remained changed—unlike her thirst, unlike the gash in her side, unlike the endlessly

soft-hearted boy soldier and his hard-assed sergeant.

"Run," Bakri says. Now her fingers always touch the barbed wire. Now she knows

how to die.

Now she fires the gun when they're perfectly distracted. She aims for the young one first because he shot her first, it's only fair; the gun's kick almost knocks it from her hands. She fires three more times, gets lucky, the third shot catches him in that baby face, a wet red fountain, and as he tumbles to the ground she laughs because she's no longer scared.

She knows why Fahrouz killed seventeen soldiers. He was just supposed to get a laptop and get out, but how many times was he beaten before he slipped past the spotlights? How long did he endure the fear of being shot before he realized The Save Point erased all consequences? The guards' dumbstruck surprise as she kills them is the repayment for a thousand torments they can never remember.

"Run," Bakri says. She does, now, eagerly. She's going to kill them as many times as

they killed her.

Irena realizes she's drifting off-mission when she starts shooting Bakri in the face. She didn't mean to shoot him; it's just that Irena had gone down in a particularly bad firefight with the soldiers, one where they'd shot her left arm before tackling her to the ground, and she'd barely jammed the tether-button against the pavement be-

fore they hauled her off to prison. And she'd fallen over again once she'd rewound. and Bakri'd grabbed her and velled, "What is your goal?" and she velled that her goal

was to shut him up and she shot him.

It was a good idea, as it turns out. She needs to shoot well, and firefights aren't a good time for lessons. So when Bakri says "Run," now she walks down the alley, takes aim, and shoots Bakri in the head. The marketplace shrieks when they hear the gun, but she just empties the clip at a garbage can and presses the tether-button.

"Run," Bakri says.

Bakri should be the one running, but he doesn't know, He's always surprised. If her

first shot doesn't kill him, he weeps apologies.

"Run," Bakri says, Then, once she jams the gun into his belly, he blubbers: "I know I should have told you the heartbeat monitor might not work. But you might not have done it then-we can't let Sammi's ideas fall into their hands!"

She doesn't care about that. That was weeks ago.

"You drove him insane, didn't you?" she asks. "He wanted to stop, didn't he?" "Him who?" Bakri is dumbfounded, Fahrouz was just vesterday for him, and al-

ready he's forgotten. She shoots him.

"Run," Bakri says.

She feels a pang of guilt once she realizes that Bakri might not even know what he did. Yet she knows what happened all the same; they told Fahrouz he had to get the laptop, and condemned him to God knows how many cycles of breaking into the Green Zone until he returned with one. Bakri and Sammi would never have turned it off until Fahrouz brought them results.

The machine doesn't drive people mad. Its controllers do.

"Run," Bakri says.

She tortures Bakri for a while, trying to get him to turn off The Save Point. He won't, and she can't break him in fifty minutes, Bakri knows Sammi will reveal The Save Point's mechanisms once they start in with the serious interrogations. He tells her he'd die a thousand times before he let the Americans have this technology.

"Run," Bakri says. "Run," Bakri says.

"Run," Bakri says . . .

Irena gets up to three hundred and seven deaths before she takes Bakri at his

She thinks about shooting The Save Point to end it all. But Bakri barely got it working, and Sammi's told her there's a shutdown sequence. What if she unplugs it and everything freezes but her? Her brother's technology is as vicious and unpredictable as Sammi himself. She doesn't dare.

Her aim's improved, though. She stops shooting Bakri and goes off to start in on the soldiers again. She's getting closer; she can catch the sniper on his wooden tower one time out of three now, and she almost always kills hard-ass or babyface. Though

she's shot them enough that she no longer thinks it's their fault.

It's the damn machine. It puts them into position like chess pieces. If it wasn't for the machine, they could see the sunset, quench their thirst with tea, do something other than be railroaded into a shootout. The machine reduces them to inputs and outputs.

Was Sammi ever angry?

She doesn't think so. That thought slides under her skin like a splinter as she reruns the four blocks to the prison. When her mother died, Irena didn't have time for anger. She had to feed her family. She hustled pirated DVDs, waited tables, whatever it took. But she cried when no one was looking.

Sammi never cried. He just played videogames and built bombs. She'd velled at

him for playing the Americans' videogames, but he went on about how well-designed they were.

"Run," Bakri says.

As she runs, she remembers a conversation: "Does it ever bother you that your bombs kill people?" she'd asked Sammi one night, as he harvested yet another Xbox for parts.

"That's the goal," he agreed, not looking up.

"No, but . . . what if it kills the wrong people?"

"Bound to happen." He plucked a chip out, held it to the light. "Sometimes people are in the wrong place."

Irena flushed with anger. "Mother was in the wrong place."

He frowned, seemed to notice her for the first time. "Well, yes." He cocked his head and squinted at her, confused. "She was."

"Run," Bakri says. Those four blocks are getting longer.

She'd told herself she couldn't judge Sammi's genius by the standards of other people. Besides, the bombs paid for their apartment. But now, running, she wonders: did Sammi make bombs to avenge his dead mother? Or was it a convenient excuse to make things that interested him?

"Run," Bakri says. She's always running for Sammi.

And by luck more than skill, she finally shoots all three. Clean headshots. They fall to the ground, the sniper toppling from his roost.

Irena stands over their bodies, dumbfounded. *I'm just a girl*, she thinks. *How did I kill three wary soldiers?* Then she remembers how long she's been doing this. Months. Maybe years.

She's almost forgotten what she's supposed to do now. She searches the older soldier's body for the key, praising God that this is just a holding location—a real prison would have thumbprint scanners and cameras—and she wonders why reinforcements aren't charging out of the gates. Then she realizes: this has all taken perhaps ninety seconds in their time. Nobody knows yet.

She flings open the door to see a dank prison lobby in dreary bureaucrat beige, plastic bucket seats and buzzing fluorescent lights and a battered front desk. A receptionist sits at the desk—not a soldier, a local boy in an American uniform, look-

ing strangely out of place. He glances up, surprised, from a phone call.

"Where is Sammi?" She smiles. It's been so long since she had a new conversation.

She aims the gun at him. He puts down the phone.

"S-Sammi?" he stammers. She's surprised he doesn't know already, then remembers this is all new to him. It's a pleasant reminder that the whole world hasn't been reduced to Sammi's Save Point.

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"Samuel Daraghmeh."

"He's ... "He looks it up. "In cell number eight."

"And that is where?"

He points down a hallway with trembling fingers. She presses the gun barrel to his temple, whispers in his ear:

"If you alert anyone, I will kill you every time from now on, and you will never know why." She removes the gun from his holster, shoots the phone. She hears a wet

dribble on the tile as he pees himself. The prisoners see the young girl with the gun walking through the halls. They rise, bruised and bleeding, begging her to save them. Their words are canned. They

will say the exact same thing whenever she returns. She ignores them. The guards inside don't wear bulletproof vests, making this easy. The prisoners

cheer as she fires.

And there, bunched in with ten other sweaty, beaten men, is Sammi, He looks miserable; the other men have crowded him out until he's perched on the dog-end of a cot. His lower lip sticks out as he stares at a urine stain in the corner, so concerned with his own fate that he hasn't even noticed the other men cheering. No wonder she has to rescue him. He's supposed to be reclined in a La-Z-Boy, a game controller in hand, not in a place where people actually get hurt.

She motions the other prisoners aside, presses her face against the rusted bars.

"Have you ever seen one of your bombs go off?"

He registers the voice, not the words, jumping up with the same boyish thrill he gets whenever he beats a final boss, "Irena!" he shouts, running to the bars. His eyes well with tears of relief.

She unlocks the cell door, "The rest of you run," she tells them, "I need to talk to

"Irena." Sammi's chest heaves. "I knew you'd come for me . . ."

"Always. But listen. Bakri is dead." That much, she thought, was true; she'd taken to strangling Bakri and burying his body under the garbage as a matter of routine. "How do you shut down the machine?"

"Oh, it's better than I'd thought," he says, eyes shining, "You're a part of my project! How many iterations did it take to get in? A thousand? Two thousand? You

must have improvements . . ."

"I do," she agrees. "I want to understand how it works. Tell me how to exit the loop." He does. It's simpler than she'd thought.

She hugs Sammi.

"You did it," she whispers, "Your machine is perfect. It makes an untrained girl into

an unstoppable killer."

He squeezes her in triumph. She lets him ride his moment of absolute perfection. judging when her brother is happiest. Then she jams the gun against the base of his neck and pulls the trigger. His face explodes. She clutches his body until it ceases quivering. Then she drops

Should she be sorrier? She probes her numbness and feels nothing. She shrugs,

starts the walk back to The Save Point to shut it down and dismantle it.

It's not until she gets to the lobby that the tears come. It takes her a moment to understand what's triggering them. From under the desk she can hear the muffled sobbing of the receptionist. He must have hidden when the prisoners escaped. She pauses long enough to tug him out, struggling, from the desk, then embraces him tightly. He

shivers, a frightened bird, as she nuzzles him, wetting his shoulder with tears. "I don't have to kill you," she says, smelling his hair, feeling his clothes, loving him

more than anyone she's ever loved before. O

## NEXT ISSUE

#### DECEMBER ISSUE

Elizabeth Bear is well known to Asimov's readers. Two of her previous appearances, "Tideline" and "Shoggoths in Bloom," resulted in Hugo Awards for best short story and novelette. She returns to our pages with a knockout novella set in an exquisitely realized future India. Police Sub-Inspector Ferron and Senior Constable Indrapramit must look for clues both in the real world and the virtual if they are to track down a clever murder. "In the House of Aryaman a Lonely Signal Burns" is a tale you won't soon forget.

#### ALSO IN DECEMBER

Long before she became the extremely competent shuttle pilot of Jack McDevitt's novels, Priscilla Hutchins received her training on a "Maiden Voyage"; new author Katherine Marzinsky gives us a heart-stopping look at what a robot might consider "Recyclable Material"; new author Eric Del Carlo examines just how hard it is to live in a world of "Friendlessness"; almost-new author Zachary Jernigan shows us why there is no cause for rejoicing when "The War Is Over and Everyone Wins"; new author for Asimov's, though well known at Analog, C.W. Johnson reveals the terror behind "The Burst"; and the Arthur C. Clarke- and John W. Campbell Memorial-award-winning author, Paul McAuley, takes us to a distant planet to show us why criminals who are born to run will follow their hungry hearts through the badlands to discover if they will be the last to die or live to see the light of day in the awesome "Bruce Springsteen."

#### OUR EXCITING FEATURES

Robert Silverberg's "Reflections" tracks down "Rare Earths, Getting Rarer"; James Patrick Kelly's "On the Net" delivers the "Son of Ebooks, the Next Generation, Vol. III"; and we'll have Paul Di Fillipo's "On Books" column. We'll also feature our Index of 2011 stories, poems, and columns; our annual Readers Award Ballot; plus an array of poetry and other items you're sure to enjoy. Look for our January issue on sale at newsstands on November 8, 2011. Or you can subscribe to Asimov's—in paper or downloadable varietis—by visiting us online at www. asimovs.com. We're also available individually or by subscription on Amazon.com's Kindle, BarnesandNoble.com's Nook, ebook store.sony.com's eReader and from Zinio.com!

Connie Willis's most recent novel, a two-volume work entitled Blackout and All Clear, is set in World War II, in the middle of the evacuation of Dunkirk, the intelligence war, and the London Blitz. It won the Nebula Award and is a current finalist for the Hugo. In reviewing Blackout, the Washington Post described Connie as "a novelist who can plot like Agatha Christie and whose books possess a bounce and stylishness that Preston Sturges might envy." She is currently working on a new novel about Roswell, alien abduction, cattle mutilations, and Area 51. It is, of course, a comedy. These books have, unfortunately, distracted Connie from writing her annual Christmas story. Luckily, this year she took some time between novels to fashion a holiday story . . .

## ALL ABOUT EMILY

#### Connie Willis

"Fuck The Red Shoes, I wanted to be a Rockette."

-A Chorus Line

All right, so you're probably wondering how I, Claire Havilland, three-time Tony winner, Broadway legend, and star of Only Human—ended up here, standing outside Radio City Music Hall in a freezing rain two days before Christmas, soaked to the skin and on the verge of pneumonia, accosting harmless passersby.

Well, it's all my wretched manager Torrance's fault. And Macy's. And the movie All

About Eve's.

You've never heard of All About Eve? Of course you haven't. Neither has anyone

else. Except Emily.

It starred Anne Baxter and Bette Davis, and was the first movie Marilyn Monroe appeared in. She played Miss Caswell, a producer's girlfriend, but the movie's not about her. It's about an aging Broadway actress, Margo Channing, and the young aspiring actress, Eve Harrington, who insinuates herself into Margo's life and makes off with her starring role, her career, and very nearly, her husband.

All About Eve was made into a musical called Applause and then into a straight dramatic play which was then made into another musical (Broadway has never been

terribly creative). The second musical, which was called *Bumpy Night* and starred Kristin Stewart as Eve and me as Margo, only ran for three months, but it won me my second Tony and got me the lead in *Feathers*, which won me my third.

Macy's is a New York department store, in case you don't know that either. Except for Emily, no one today seems to know anything that happened longer than five minutes ago. Macy's sponsors a parade on Thanksgiving Day every year, featuring large balloons representing various cartoon characters, the stars of various Broadway shows waving frozenly from floats, and the Rockettes.

And my manager Torrance is a lying, sneaky, conniving snake. As you shall see.

The Wednesday night before Thanksgiving he knocked on my dressing-room door during intermission and said, "Do you have a minute, dear one? I've got fabulous news!"

I should have known right then he was up to something. Torrance only comes backstage when: one, he has bad news to deliver, or two, he wants something. And he never knocks.

"The show's closing," I said.

"Closing? Of course not. The house is sold out every night through Christmas. And it's no wonder! You get more dazzling with every performance!" He clutched his chest dramatically. "When you sang that Act One finale, the audience was eating out of your hand!"

"If you're still trying to talk me into having lunch with Nusbaum, the answer is no," I said, unzipping my garden party costume. "I am not doing the revival of Chicago."

"But you were the best Roxie Hart the show ever had—"

"That was twelve years ago," I said, shimmying out of it. "I have no intention of wearing a leotard at my age. I am too old—"

"Don't even say that word, dear one," he said, looking anxiously out into the hall and pulling the door shut behind him. "You don't know who might hear you."

"They won't have to hear me. One look at me in fishnet stockings, and the audience will be able to figure it out for themselves."

"Nonsense," he said, looking appraisingly at me. "Your legs aren't that bad."

Aren't that bad. "Dance ten, looks three?" I said wryly.

He stared blankly at me.

"It's from A Chorus Line, a show I was in that you apparently never bothered to see. It's a line that proves my point about the fishnet stockings. I am not doing Chicago."

"All Nusbaum's asking is that you meet him for lunch. What harm could that do? He didn't even say what role he wanted you for. It may not be Roxie at all. He may want you for the part of—"

"Who? The warden?" I said, scooping up my garden-party costume into a wad. "I told you I was too old for fishnet stockings, not old enough to be playing Mama Morton." I threw it at him. "O' Mama Rose. Or I Remember Mama."

"I only meant he might want you to play Velma," he said, fighting his way out of

the yards of crinoline.
"No," I said. "Absolutely not. I need a role where I keep my clothes on. I hear Auster-

man's doing a musical version of Desk Set. "Desk Set?" he asked. "What's it about?"

Apparently he never watched movies either. "Computers replacing office workers," I said. "It was a Julia Roberts-Richard Gere movie several years ago, and there are no fishnet stockings in it anywhere." I wriggled into my ball gown. "Was that all you wanted?"

I knew perfectly well it wasn't. Torrance has been my manager for over fifteen years, and one thing I've learned during that time was that he never gets around to what he really wants till Act Two of a conversation, apparently in the belief that he

can soften me up by asking for some other thing first. Or for two other things, if what he wants is particularly unpleasant, though how it could be worse than doing Chicago, I didn't know.

"What did you come in here for, Torrance?" I asked. "There are only five minutes to

curtain."

"I've got a little publicity thing I need you to do. Tomorrow's Thanksgiving, and the Macy's parade—"

"No, I am not riding on the Only Human float, or standing out in a freezing rain again saying. (Look! Here comes the Wall-E balloon!"

There was a distinct pause, and then Torrance said, "How did you know there's a

Wall-E balloon in the parade? I thought you never read the news."

"There was a picture of it on the home page of the Times yesterday."

"Did you click to the article?"

"No. Why? As you say, I never read the news. You didn't already tell them I'd do it, did you?" I said, my eyes narrowing.

"No, of course not. You don't have to go anywhere near the parade."

"Then why did you bring it up?"

"Because the parade's Grand Marshal is coming to the show Friday night, and I'd

like you to let him come backstage after the performance to meet you."

"Who is it this year?" I asked. It was always a politician, or whatever talentless tween idol was going to be starring on Broadway next. "If it's any of Britney Spears' offspring, the answer is no."

"It's not," Torrance said. "It's Doctor Edwin Oakes."

"Doctor?"

"Of physics. Nobel Prize for his work on artificial neurotransmitters. He founded AIS."

"Why on earth is a physicist the Grand Marshal of the Macy's Day Parade?" I said. "Oh, wait, is he the robot scientist?"

There was another pause. "I thought you said you didn't read the article."

"I didn't. My driver Jorge told me about him."

"Where'd he hear about Dr. Oakes?"

"On the radio. He listens to it in the limo while he's waiting."

"What did Jorge tell you about him?"

"Just that he'd invented some new sort of robot that was supposed to replace ATMs and subway-ticket dispensers, and that I shouldn't believe it, they were going to steal all our jobs— Oh, my God, you're bringing some great, clanking Robbie the Robot backstage to meet me!"

"No, of course not. Don't be ridiculous. Would I do that?"

"Yes. And you didn't answer my question. Is this the same Dr. Oakes, the robot scientist?"

"Yes, only they're not robots, they're 'artificials.'"

"I don't care what they're called. I'm not granting a backstage interview to C3PO."
"You're dating yourself, dear one," he said. "C3PO was *aeons ago*. The reason Dr.
Oakes was asked to be the Grand Marshal is that this year's parade theme is robots,
in honor of—"

"Don't tell me-Forbidden Planet, right? I should have known."

Forbidden Planet. The second worst show to ever have been on Broadway, but that hasn't stopped it from packing them in down the street at the Majestic, thanks to Robbie the Robot and a never-ending procession of tween idols (at this point it's Shiloh Jolie-Pitt and Justin Bieber, Jr.) in the starring roles. "And I suppose that's where this Dr. Oakes is tonight?"

"No, they didn't want to see Forbidden Planet-"

"They?" I said suspiciously.

"Dr. Oakes and his niece. They didn't want to meet Shiloh and Justin. They want

to see Only Human. And to meet you."

I'll bet, I thought, waiting for Torrance to get to the real reason he'd come backstage to see me, because meeting a couple of fans couldn't be it. He dragged a ragtag assortment of people backstage every week. He wasn't still trying to talk me into doing the latest revival of Cats, was he? It was not only the worst musical ever produced on Broadway, but it required tights and whiskers.

"Dr. Oakes's niece is really eager to meet you," Torrance was saying. "She's a huge fan of yours. It will only take five minutes," he pleaded. "And it would certainly help

with ticket sales.'

"Why do the ticket sales need help? I thought you said we had full houses through Christmas."

"We do, but the weather's supposed to turn bad next week, and sales for after New Year's have been positively limp. Management's worried we won't last through January. And the word is Disney's scouting for a theater where they can put the new production of Tangled. If they get nervous about our closing—"

"I don't see how meeting them will help us get publicity. Physicists are hardly

front-page news."

"I can guarantee it'll get us publicity. WNET's already said they'll be here to livestream it. And Sirius. And when Emily said she wanted to meet you on Good Morning, America yesterday, ticket sales for this weekend went through the roof."

"I thought you said we were already sold out through Christmas."

"I said Only Human was playing to full houses."

Which meant half the tickets were going for half-price at the TKTS booth in Times Square and the back five rows of the balcony were roped off for "repairs."

"And you know what management's like when they think they're going to lose their investment. They'll jump at anything-"

"All right," I said. "I'll meet with Dr. Nobel Prize and his niece, if she is his niece. Which I seriously doubt."

"Why do you say that?" Torrance said sharply.

"Because all middle-aged men are alike, even scientists. Her name wouldn't be Miss Caswell, would it?"

"Who?"

"The producer's girlfriend," I said. I pantomimed a pair of enormous breasts. "Ring a bell?" He looked blank. "Really, Torrance, you should at least pretend to have watched the plays I'm starring in.

"I do. I have. I just don't remember any Miss Caswell in Only Human."

"That's because she wasn't in Only Human. She was in Bumpy Night. Lindsay Lohan played her, remember?" and when he still looked blank, "Marilyn Monroe played her in the original movie. And please don't tell me you don't know who that is, or you'll make me feel even more ancient than I am."

"You're not ancient, dear one," he said, "and I wish you'd stop being so hard on

yourself. You're a legend."

Which is a word even more deadly to one's career than "old" or "cellulite." And only slightly less career-ending than "First Lady of the Theater." I said, "Yes, well, this legend' just changed her mind. No backstage interview."

"Okay," he said. "I'll tell them no dice. But don't be surprised if they decide to go to Forbidden Planet instead. Their entire cast has agreed to a backstage interview, including Justin."

"All right, fine, I'll do it," I said, "If you get me out of the lunch with Nusbaum and talk to Austerman about Desk Set."

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"I will. This interview will help on the *Desk Set* thing," he said, though I couldn't see how. "Star Meets Fans" is hardly home-page news. "You'll be glad you did this. You're going to like Emily."

There was only one thing to like about having been blackmailed into doing the interview: our discussion of it had taken up the entire intermission, and Torrance hadn't

had time to ask me the thing he'd actually come backstage to.

I expected him to try again after the show, but he didn't. He left a message saying, "WABC will be there to film meeting. Wear something suitable for Broadway legend. Sunset Boulevard?" Which was either proof that he saw me much as I was beginning to see myself, as a fading (and deranged) star, or that he hadn't seen the musical Sunset Boulevard either.

I had the wardrobe mistress hunt me up the magenta hostess gown from *Mame* and a pair of *Evita* earrings, signed autographs for the fans waiting outside the stage

door, turned my phone off, and went home to bed.

I kept my phone off through Thanksgiving Day so Torrance couldn't call me and insist I watch Dr. Oakes in the parade, but I didn't want to miss a possible call from Austerman about Desk Set, so Friday I turned it back on, assuming (incorrectly) that Torrance would immediately call and make another attempt at broaching the subject of whatever it was he'd really come to my dressing room about.

Because it couldn't possibly be the scruffy-Jooking professor and his all-dressed-up niece who Torrance brought to my dressing room Friday night after the show. I could see why Torrance had rejected the idea of her being the producer's mistress. This petite, fresh-scrubbed teenager with her light brown hair and upturned nose and pink cheeks was nothing like Marilyn Monroe. She was nothing like the gangly, tattooed, tipped, and tattered girls who clustered outside Forbidden Planet every night either, waiting for Shiloh Jolie-Pitt to autograph their playbills.

This girl, who couldn't be more than five-foot-two, looked more like Peggy in the first act of 42nd Street, wide-eyed and giddy at being in New York City for the first time. Or a sixteen-year-old Julie Andrews. The sort of dewy-eyed innocent ingénue that every established actress hates on sight. And that the New York press can't wait

to get its claws into.

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But they were being oddly deferential. And they were all here. Not just Good Morning, America, but the other networks, the cable channels, the Times, the Post-

Daily News, and at least a dozen bloggers and streamers.

"How'd you manage to pull this off?" I whispered to Torrance as they squeezed into my dressing room. Apart from the Tonys, Spider-Man III accidents, and Hollywood stars, it's impossible to get the media to cover anything theatrical. "Lady Gaga's not replacing me, is she?"

He ignored that. "Claire, dear one," he said, as if he were in a production of Noel Coward's *Private Lives*, "allow me to introduce Dr. Edward Oakes. And this," he said,

presenting the niece to me with a flourish, "is Emily."

"Oh, Miss Havilland," she said eagerly. "It's so exciting to meet you. You were just wonderful."

Well, at least she hadn't said it was an honor to meet me, or called me a legend.

"I loved Only Human," she said. "It's the best play I've ever seen."

It was probably the only play she'd ever seen, but Torrance had been right, this meeting would be good publicity. The media were recording every word and obviously responding to Emily's smile, which even I had to admit was rather sweet.

"You sing and dance so beautifully, Miss Havilland," she said. "And you make the

audience believe that what they're seeing is real-"

"You're Emily's favorite actress," Torrance cut in. "Isn't that right, Emily?"

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"Oh, yes. I've seen all your plays—Feathers and Play On! and The Drowsy Chaperone and Fender Strat and Anything Goes and Love, Etc."

"But I thought Torrance said this was your first time in New York," I said. And she

was much too young to have seen Play On! She'd have been five years old.

"It is my first time," she said earnestly. "I haven't seen the plays onstage, but I've seen all your filmed performances and the numbers you've done at the Tony Awards—"When They Kill Your Dream' and 'The Leading Lady's Lament." And I've watched your interviews on YouTube, and I've read all your online interviews and listened to the soundtracks of A Chorus Line and Tie Dye and In Between the Lines."

"My, you are a fan!" I said. "Are you sure your name's Emily and not Eve?"

"Eve?" Dr. Oakes said sharply.

Torrance shot me a warning glance, and the reporters all looked up alertly from the Androids they were taking notes on. "Why would you think her name was Eve,

Miss Havilland?" one of them asked.

"I was making a joke," I said, taken aback at all this reaction. And if I said it was a reference to Eve Harrington, none of them would have ever heard of her, and if I said she was a character in *Bumpy Night*, none of them would have heard of that either. "I—"

"She called me Eve because I was doing what Eve Harrington did," Emily said. "That's who you meant, isn't it, Miss Havilland? The character in the musical Bumpy Night?"

"I...y-yes," I stammered, trying to recover from the shock that she'd recognized the allusion. The younger generation's knowledge usually doesn't extend farther back than *High School Musical: The Musical*.

"When Eve meets the actress Margo Channing," Emily was cheerfully telling the

reporters, "she gushes to her about what a wonderful actress she is."

"Bumpy Night?" one of the reporters said, looking as lost as Torrance usually does.
"Yes," Emily said. "The musical was based on the movie All About Eve, which

starred Bette Davis and Anne Baxter."

"And Marilyn Monroe," I said.

"Right," Emily said, dimpling. "As Miss Caswell, the producer's girlfriend. It was

her screen debut."

I was beginning to like this girl, in spite of her perfect skin and perfect hair and the way she could hold an audience. The media were hanging on her every word. Although that might be because they were as astonished as I was at a teenager's knowledge of the movies. "—and Marilyn Monroe was in Gentlemen Prefer Blondes and How to Marry a Millionaire," she said, "which Lauren Bacall was in, too. She starred in the first musical they made of All About Eve: Applause. It wasn't nearly as good as Bumpy Night, or as faithful to the movie."

And since she knew so much about movies, maybe this was a good time to put in a pitch for my doing Austerman's play. "Have you ever seen *Desk Set*, Emily?" I asked her.

"Which one? The Julia Roberts-Richard Gere remake or the original with Katherine Hepburn and Spencer Tracy?"

Good God. "The original."

"Yes, I've seen it. I love that movie."

"So do I," I said. "Did you know they're thinking of making a musical of it?"

"Oh, you'd be wonderful in the Katherine Hepburn part!"

I definitely liked this girl.

"What about Cats?" Torrance asked.

I glared at him, but he ignored me.

"Have you ever seen the musical Cats?" he persisted.

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"Yes," she said and wrinkled her nose in distaste. "I didn't like it. There's no plot at all, and 'Memories' is a terrible song. Cats isn't nearly as good as Only Human."

"You see, Torrance?" I said and turned my widest smile on Emily. "I'm so glad you

came to the show tonight.'

"So am I," she said. "I'm sorry I sounded like Eve Harrington before. I wouldn't want to be her. She wasn't a nice person," she explained to the reporters. "She tried to steal Margo's part in the play from her."

"You're right, she wasn't very nice," I said. "But I suppose one can't blame her for wanting to be an actress. After all, acting's the most rewarding profession in the

world. What about you, Emily? Do you want to be an actress?"

It should have been a perfectly safe question. Every teenaged girl who's ever come backstage to meet me has been seriously stage-struck, especially after seeing their first Broadway musical, and Emily had to be, given her obsessive interest in the movies and my plays.

But she didn't breathe, "Oh, ves." like every other girl I'd asked. She said, "No. I

don't."

You're lying, I thought.

"I could never do what you do, Miss Havilland," Emily went on in that matter-offact voice.

"Then what do you want to do? Paint? Write?"

She glanced uncertainly at her uncle and then back at me.

"Or does your uncle want you to be a neurophysicist like him?" I asked.

"Oh, no, I couldn't do that either. Any of those things."

"Of course you could, an intelligent girl like you. You can do anything you want to do."

"But I—" Emily glanced at her uncle again, as if for guidance.

"Come, you must want to be something," I said. "An astronaut. A ballerina. A real boy."
"Claire, dear one, stop badgering the poor child." Torrance said with an artificial-

sounding laugh. "She's in New York for the very first time. It's scarcely the time for career counseling."

"You're right. I'm sorry, Emily, "I said. "How are you liking New York?"

"Oh, it's wonderful!" she said.

The eagerness was back in her voice, and Dr. Oakes had relaxed. Did she want to go on the stage and her uncle didn't approve? Or was something else going on? "How are you liking New York?" was hardly riveting stuff, but there wasn't a peep out of the media. They were watching us raptly, as if they expected something to happen at any second.

I should have read the article in the Times, I thought, and asked Emily if she'd

been to the Empire State Building yet.

"No," she said, "we do that tomorrow morning after we do NBC Weekend, and then at ten I'm going ice-skating at Rockefeller Center. It would be wonderful if you could come, too."

"At ten in the morning?" I said, horrified. "I'm not even up by then." and the re-

porters laughed. "Thank you for asking me, though. What are you doing tomorrow night?" I asked, and then realized she was likely to say, "We're seeing Forbidden Planet," but I needn't have worried.

"We're going to see the Christmas show at Radio City Music Hall," she said.

"Oh, good. You'll love the Rockettes. Or have you seen them already? They were in the parade, weren't they?"

"No," Emily said. "What are—?"
"They don't ride in the parade," Torrance said, cutting in. "They dance outside

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Macy's on Thirty-fourth Street. What else are you and your uncle doing tomorrow, Emily?"

"We're going to Times Square and then Macy's and Bloomingdale's to see the Christmas windows and then FAO Schwarz-"

"Good God," I said. "All in one day? It sounds exhausting!"

"But I don't-" Emily began.

This time it was Dr. Oakes who cut in. "She's too excited at being here to be tired." he said. "There's so much to see and do. Emily's really looking forward to seeing the Rockettes, aren't you?" He nodded at her, as if giving her a cue, and the reporters leaned forward expectantly. But they weren't looking at her, they were looking at me.

And suddenly it all clicked into place—their wanting to avoid the subject of her being tired, and Torrance's wanting to know what I'd read about the parade, and Emi-

ly's encyclopedic knowledge of plays and the Wall-E balloon.

The parade's robot theme wasn't in honor of Forbidden Planet. It was in honor of Dr. Oakes and his "artificials," one of which was standing right in front of me. And those cheeks were produced by sensors, that wide-eved look and dimpled smile were programmed in.

Torrance, the little rat, had set me up, He'd counted on the fact that I only read Va-

riety and wouldn't know who Emily was.

And no wonder the media was all here. They were waiting with bated breath for the moment when I realized what was going on. It would make a great YouTube

video-my shocked disbelief, Dr. Oakes's self-satisfied smirk, Torrance's laughter. And if I hadn't tumbled to it, and she'd managed to fool me all the way to the end of the interview with me none the wiser, so much the better. It would be evidence of what Dr. Oakes was obviously here to prove—that his artificials were indistinguishable from humans.

Emily really is Eve Harrington, I thought. Innocent and sweet and vulnerable-look-

ing. And not at all what she appears to be.

But if I said that, if I suddenly pointed an accusing finger at her and shouted, "Impostor!" it would blow the image Dr. Oakes and AIS were trying to promote and make Torrance furious. And, from what I'd seen so far, Emily might be capable of bursting into authentic-looking tears, and I'd end up looking like a bully, just like Margo Channing had at the party in Bumpy Night, and there would go any chance I had of getting the lead in Desk Set.

But if I went on pretending I hadn't caught on and continued playing the part Torrance had cast me in in this little one-act farce, I'd look like a prize fool. I could see the headline crawl on the Times building in Times Square now: "Bumpy Night For Broadway Legend." And "Robot Fools First Lady of the Theater." Not exactly the sort

of publicity that gets an actress considered for a Tony.

Plus, the entire point of Desk Set was that humans are smarter than technology. What would Katherine Hepburn do in this situation? I wondered. Or Margo Channing? "You'll love the Christmas show," Torrance was saying. "Especially the nativity

scene. They have real donkeys and sheep. And camels.'

"I'm sure it will be wonderful," Emily said, smiling winsomely over at me, "but I don't see how it can be any better than Only Human.

Only human. Of course. That was why they'd wanted to see the play and come backstage to trick me. "Fasten your seat belts," I said silently. "It's going to be a bumpy night."

"And you'll love Radio City Music Hall itself." Torrance said. "It's this beautiful Art Deco building."

Dr. Oakes nodded, "They've offered to give us a tour before the show, haven't they. Emily?"

All About Emily 8.5 This was my cue. "Emily," I repeated musingly. "That's such a pretty name. You never hear it anymore. Were you named after someone?"
The reporters looked up as one from their corders and Androids and Dr. Oakes

The reporters looked up as one from their corders and Androids and Dr. Oaker tensed visibly. Which meant I was right.

"Yes," Emily said. "I was named after Emily Webb from-"

"Our Town," I said, thinking, Of course. It was perfect. Except for Little Eva in Uncle Tom's Cabin, Emily Webb was the most sickeningly sweet ingénue to ever grace the American stage, tripping girlishly around in a white dress with a big bow in her hair and prattling about how much she loves sunflowers and birthdays and "sleeping and waking un." and then dying tragically at the beginning of Act Three.

"It was her mother's favorite play," Dr. Oakes said. "And Emily was her favorite

character."

"Oh," I said, and added casually, "I hadn't realized she was named after someone. I'd just assumed it was an acronym."

"An acronym?" Dr. Oakes said sharply.

"Yes, you know. MLE. For 'Manufactured Lifelike Entity' or something."

There was a dead silence, like the one that follows the revelation that  $\Gamma$ m Hope's daughter in the third act of *Only Human*, and the reporters began to thumb their Androids furiously.

I ignored them. "And then I thought it might be your model number," I said to Emi-

ly. "Was your face modeled on Martha Scott's? She--'

"Played Emily Webb in the original production, which starred Frank Craven as the Stage Manager," Emily said. "No, actually, it was modeled on JoAnn Sayers, who played Eileen in—"

"The original Broadway production of My Sister Eileen," I said.

"Yes," she said happily. "I wanted to be named Eileen, but Uncle—I mean, Dr. Oakes—was worried that the name might suggest the wrong things. Eileen was much sexier than Emily Webb."

And she'd caused an uproar everywhere she went, ending up with half of New York and the entire Brazilian Navy following her in a wild conga line, something I

was sure Dr. Oakes didn't want to have happen with his artificial.

"Women sometimes find sexiness in other women intimidating," Emily said. "I'm designed to be non-threatening."

"So of course the name Eve was out, too?"

"Yes," she said earnestly, "But we couldn't have used it anyway. It tested badly among religious people. And there was the Wall-E problem. Dr. Oakes didn't want a name that made people immediately think of robots."

"So I suppose the Terminator was out, as well," I said dryly. "And HAL."

The media couldn't restrain themselves any longer. "When did you realize Emily was an artificial?" the *Times.com* reporter asked.

"From the moment I saw her, of course. After all, acting is my specialty. I knew at once she wasn't the real thing."

"What tipped you off exactly?" the YouTube reporter said.

"Everything," I lied. "Her inflection, her facial expressions, her timing—"

Emily looked stricken.

"But the flaws were all very minor," I said reassuringly. "Only someone—"
I'd started to say "Only someone who's been on the stage as long as I have," but
caught myself in time. "Only a pro could have spotted it," I said instead. "Professional actors can spot someone acting when the audience earlt."

And that had better be true, or they'd realize I was lying through my teeth. "You're

very, very good, Emily," I said and smiled at her.

She still looked upset, and even though I knew it wasn't real, that there was no ac-

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tual emotion behind her troubled expression, her bitten lip, I said, "I'm not even certain I would have spotted it except that you were so much more knowledgeable about the theater than the young women who usually come backstage. Most of them think A Little Night Music is a song from Twilight: The Musical."

All but two of the reporters laughed. They-and Torrance-looked blank.

"You're simply too intelligent for your own good, darling," I said, smiling at her. "You should take a lesson from Carol Channing when she played—"

"Lorelei Lee in Gentlemen Prefer Blondes," she said, and then clapped her hand to her mouth.

The reporters laughed.

"But what really tipped me off," I said, squeezing her lifelike-feeling shoulder affectionately, "was that you were the only person your age I've met who wasn't stage-struck,"

"Oh, dear." Emily looked over at Dr. Oakes. "I knew I should have said I wanted to be an actress." She turned back to me. "But I was afraid that might give the impression that I wanted your job, and of course I don't. Artificials don't want to take any-

one's job away from them."

"Our artificials are designed solely to help humans." Dr. Oakes said, "and to do only tasks that make humans' jobs easier and more pleasant," and this was obviously the company spiel. "They're here to bring an end to those machines everyone hates—the self-service gas pump, the grocery store checkout machine, electronic devices no one can figure out how to program. Wouldn't you rather have a nice young man fixing the bug in your laptop than a repair program? Or have a friendly, intelligent operator connect you to the person you need to talk to instead of trying to choose from a dozen options, none of which apply to your situation? Or-" he nodded at me, "tell you who starred in the original production of a musical rather than having to waste time looking it up on Google?"

"And you can do all that?" I asked Emily. "Pump gas and fix computers and spit out

twenties?"

"Oh, no," she said, her eyes wide. "I'm not programmed to do any of those things. I was designed to introduce artificials to the public."

And to convince them they weren't a threat, to stand there and look young and

decorative. Just like Miss Caswell.

"Emily's merely a prototype," Dr. Oakes said, "The actual artificials will be programmed to do a variety of different jobs. They'll be your maid, your tech support, vour personal assistant.

"Just like Eve Harrington," I said.

"What?" Dr. Oakes said, frowning.

"Margo Channing hired Eve Harrington as her personal assistant," Emily explained, "and then she stole Margo's career."

"But that can't happen with artificials," Dr. Oakes said. "They're programmed to assist humans, not supplant them." He beamed at me. "You won't ever have to worry about an Eve Harrington again."

"Dr. Oakes, you said they're forbidden to take our jobs," one of the reporters called out, "but if they're as intelligent as we've just seen Emily is, how do we know they

won't figure out a way to get around those rules?"

"Because it's not a question of rules," Dr. Oakes said. "It's a question of programming. A human could 'want' someone else's job. An artificial can't. 'Wanting' is not in their programming.

"But when I asked Emily about her name," I reminded him, "she said she original-

ly wanted to be called Eileen."

"She was speaking metaphorically," Dr. Oakes said, "She didn't 'want' the name in the human sense. She was expressing the fact that she'd made a choice among op-

All About Emily 87 tions and then altered that choice based on additional information. She was simply using the word 'want' as a shortcut for the process."

And to persuade us she thinks just like we do, I thought. In other words, she was

acting. "And what about when she said she loved the play?" I asked him.
"I shid love it," Emily said, and it might all be programming and sophisticated sensors, but she looked genuinely distressed.

They have preferences just like humans," Dr. Oakes explained.

"Then what's to keep them from 'preferring' they had our jobs?" the same reporter

"Yeah," another one chimed in. "Wouldn't it be safer to program them not to have preferences at all?"

"That's not possible," Emily said. "Simulating human behavior requires higher-level thinking, and higher-level thinking requires choosing between options—"

et thinking, and nigher-level thinking requires choosing between options—
"And often those options are equally valid," Dr. Oakes said, "the choice of which
word or facial expression to use, of which information to give or withhold—"

Like the fact that you're an artificial. I thought, wondering if Dr. Oakes would in-

clude in his lecture the fact that higher-level thinking involved the ability to lie.
"Or the option of which action to take," he was saying. "Without the ability to

choose one thing over another, action, speech—even thought—would be impossible."
"But then what keeps them from 'choosing' to take over?" a third reporter asked.
"They've been programmed to take into consideration the skills and attributes hu-

and authorises numans have that make them better qualified for the vast majority of jobs. But the qualities that cause humans to *desire* jobs and careers are not programmed in—initiative, drive, and the need to stand out individually."

"Which means your job's safe, Claire," Torrance said.

"Exactly," Dr. Oakes said without irony. "In addition, since artificials' preferences are not emotion-based, they lack the lust for power, sex, and money, the other factors driving job-motivation. And, as a final safeguard, we've programmed in the impulse to please humans. Isn't that right, Emily?"

"Yes," she said. "I wouldn't want to steal anybody's job. Especially yours, Miss Havil-

land."

Which is exactly what Eve Harrington said, I thought.

But this was supposed to be a photo-op, not a confrontation, and it was clear the reporters—and Torrance—had bought her act hook, line, and sinker, and that if I said anything. If do ome off use like Margo Channing at the party—a complete bitch.

Šo I smiled and posed for photos with Emily and when she asked me if I'd go with them to the Radio City Music Hall Christmas Show ("I'm sure the Mayor can get us

an extra ticket") I didn't say, "Over my dead body."

I said regretfully, "I have a show to do, remember?" And to make Torrance happy, "All of you out there watching, come see Only Human at the Nathan Lane Theater on West Forty-fourth Street. Eight o'clock."

"You were absolutely marvelous!" Torrance said after everyone had gone. "Your best performance ever! Well be sold out through Easter. I don't suppose you'd be willing to reconsider doing the ice-skating-at-Rockefeller-Center thing? If would make a great photo-op. All you'd have to do is put on a cute little skating skirt and spend half an hour glidning around—"

"No skating skirts," I said, stripping off my earrings. "No tights. No-"

"No leotards. Sorry, I forgot. Maybe we can get her back here for a tour of the theater. If we can, we'll be sold out all the way through summer. Or you could invite her to your apartment for luncheon tomorrow."

"No luncheon," I said, wiping off my makeup, "No tours. And no robots."

"Artificials," he corrected automatically, and then frowned. "I thought you liked "Fmily"

"That's called acting, darling."

"But why don't you like her?

"Because she's dangerous."

"Dangerous? That sweet little thing?"

"Exactly. That sweet little innocent, adorable, utterly harmless Trojan horse."

"But you heard Dr. Oakes. His artificials are programmed to help people, not steal their jobs."

"And they said movies wouldn't kill vaudeville, the synthesizer wouldn't replace the theater orchestra, and CGI sets wouldn't replace the stage crew."

"But you heard him, they've put in safeguards to prevent that. And even if they hadn't, Emily couldn't replace you. She can't act."

"Of course she can act. What do you think she was doing in here for the last hour? Mimicking emotions one doesn't have—I believe that's the definition of acting."

"I can't believe you're worried about this. No one could replace you, Claire. You're one of a kind. You're a—"

"Don't you dare say 'legend.'"

"I was going to say 'a star.' Besides, you heard Emily. She doesn't want to be an ac-

tress."

"I heard her, but that doesn't mean she won't be waiting outside that stage door

when I leave, asking if she can be my assistant. And the next thing you know, I'll be stuck in the middle of Vermont, out of gas and out of a job."
"Vermont?" Torrance, said blankly. "Why are you gaing to Vermont? You're not

"Vermont?" Torrance said blankly. "Why are you going to Vermont? You're not thinking of doing summer stock this year, are you?"

Which made me wonder if I should hire her as my personal assistant after all, just to have someone around who'd actually seen Bumpy Night. And knew what "Dance ten, looks three" meant.

But she wasn't in the crowd of autograph seekers—a crowd considerably smaller than that outside the Majestic, where Forbidden Planet was playing, I couldn't help notice. Nor was she waiting by the limo, nor at my apartment, already making herself at home. like Eve had done in Scene Three.

And she wasn't outside my door when I got up the next morning. The Post-Daily News was, no doubt left there by Torrance, with a very nice write-up—a photo and two entire columns about the backstage visit, which I was happy to see did not refer to me as a legend, and half an hour later Torrance called to tell me Only Human was sold out through February. "And it's all thanks to you, darling."

"Flattery will get you nowhere," I said. "I'm still not going ice-skating."

"Neither is Emily," he said. "It's pouring rain outside."

Good, I thought. Emily would have to go convince the public she wasn't a threat to them at the Chrysler Building or MOMA or something. Or if she's such a huge fan of mine, maybe she'll come see Only Human again. But she wasn't in the audience at the matinee.

I was relieved. In spite of Dr. Oakes's assurances that AIS's artificials weren't here to steal our jobs and Emily's earnest protestations that she didn't want to be an actress, the parallels to All About Eve were a bit too close for comfort. I mean, who were we kidding? If artificials weren't a threat, Dr. Oakes and AIS wouldn't be expending so much time and effort convincing us they weren't.

So I wasn't at all unhappy when the rain turned into a sleety downpour just before the evening performance, even though it meant there were cancellations and the audience that did come out smelled like wet wool. They coughed and sneezed their way through both acts and dropped their umbrellas noisily on every important line, but at least Emily wouldn't be waiting for me outside the stage door afterward

like Eve Harrington in Scene Two of Bumpy Night.

In fact, no one was at the stage door or out front, though the sleet apparently hadn't stopped the Forbidden Planet fans down the street. A huge crowd of them huddled under umbrellas, clutching their sodden Playbills, waiting for Shiloh and Justin, Jr. And so much for Torrance's saying my meeting with Emily would bring in the younger demographic.

My driver Jorge splashed toward me with an open umbrella. I ducked gratefully under its shelter and let him shepherd me toward the waiting limo and into the back

seat.

I sat down and shook out the tails of my coat while he went around to the driver's

side, and then I bent to see how much damage had been done to my shoes.

A girl was banging on my window with the flat of her hand. I could see the hand but not who it was through the fogged-up window. But whoever it was knew my name. "Miss Havilland!" she called, her voice muffled by the closed window and the traffic going by. "Wait!"

Justin's not the only one with fans who are willing to freeze to death to get an autograph, I thought and fumbled with the buttons in the door, attempting to roll down the window. "Which button is it?" I asked Jorge as he eased his bulk into the driver's

seat

"The one on the left," he said, slamming his door and starting the car. "If you want,

I can drive off."

"And leave a fan?" I said. "Heaven forbid," even though with the week I'd had it would probably only turn out to be a Forbidden Planet fan who'd gotten tired of waiting and decided to get my autograph instead of Justin's so she could get in out of the sleety rain. "Signing autographs is a Broadway legend's duty," I said, and pushed the button.

"Oh, thank you, Miss Havilland," the girl said, clutching the top of the window as it

began to roll down. "I was afraid you were going to drive away."

It was Emily, looking like a drowned rat, her light-brown hair plastered to her forehead and cheeks, rain dripping off her eyelashes and nose.

"What are you doing here?" I demanded, though it was obvious. This was exactly

like the scene in Bumpy Night when Eve told Margo Channing she hadn't eaten for days because she'd spent all her money on tickets to Margo's play.

days because she'd spent all her money on tickets to Margo's play.

"I have to talk to you," she said urgently, and I had to admire Dr. Oakes's engi-

neering genius. Emily's cheeks and nose were the vivid red of freezing cold, her lips looked pale under her demure pink lipstick, and the knuckles of her hands, clutching the rolled-down window, were white.

She's not really cold. I told myself. That's all done with sensors. They're pro-

She's not really cold, I told myself. That's all done with sensors. They're programmed responses. But it was difficult not to feel sorry for her standing there, the

illusion was so perfect.

And it had obviously convinced Jorge. He leaned over the back seat to ask, "Shouldn't you ask her to get in the car?"

you ask her to get in the car?"

No. I thought. If I do, she'll tell me some sob story, and the next thing you know I'll

be hiring her on as my understudy. And I have no intention of being the next Margo Channing, even if she does look pathetic. I didn't say that. I said. "Where's Dr. Oakes? I thought you two were supposed to go

see the Christmas show at Radio City Music Hall tonight."

"We were . . . we . . . I did," she stammered. "But something happened—"

"To Dr. Oakes?" I said and had a sudden image of her killing him, like Frankenstein's monster, and rampaging off into the night.

"No," she said. "He doesn't know I'm gone. I sneaked away so I could talk to you

about what happened. Something . . . I . . . something happened to me while I was

watching the show."

Of course. "And you decided you want to be an actress after all," I said dryly, or rather with as much dryness as it was possible to muster with gusts of icy rain blow-

ing on me.

Her eyes widened in a perfect imitation of astonishment. "No. Please, Miss Havil-

land," she pleaded. "I have to talk to you."

"You can't just let her stand out there like that." Jorge said reproachfully. "She'll

catch pneumonia

No, she won't, I thought, but he was right. I couldn't just let her stand out there. The water might short out her electronies or rust her gears or something. And if anyone happened to see her standing there, begging to be let in, I'd look like a monster. And even if I told them she was a robot, they'd never believe it, seeing her standing there with her red nose and blue lips. And now her teeth were chattering, for God's sake. "Get in the ear," I said.

Jorge hurried around to open the door for Emily, and she scrambled in, getting water everywhere. "Thank you so much, Miss Havilland," she said, grabbing my hand, and her sensors were even better than I'd thought they were. Her hands felt exactly as icv as a fan's would have, standing out in that sleety rain.

is ity as a ian's would have, standing out in that sleety rain.
"Turn on the heat." I ordered Jorge. "Emily, where were you when you sneaked

away from Dr. Oakes? At Radio City Music Hall?"
"Yes, I told him I needed to go to the ladies' room off the Grand Lounge."

The ladies' room? Just how authentic was she?

"To see the murals," she said. "They were done by Witold Gordon, and they show the history of cosmetics through the ages—Cleopatra and the Greeks and Marie Antoinette and—"

"And something happened to you in the ladies' room?"

"No," she said, frowning. "I told him I was going to the ladies' room so I could sneak out the side door."

Definitely able to lie, I thought. "How long ago was this?" I asked her.

"Eighteen minutes. I ran all the way."

Less than twenty minutes, which hopefully meant Dr. Oakes hadn't panicked yet and filed a "Missing Robot" report.

"Jorge, give me your phone," I said.

He did

"Emily, what's Dr. Oakes's cell phone number?"

"Oh. don't send me back!"

"I won't." I promised. "Tell me his number."

She did.

"This is Claire Havilland," I told him when he answered. "I called to tell you not to wory—Emily's with me. I'm giving her a tour of the theater and then we're going out for some authentic New York cheesecake."

"She can't eat cheesecake. She's an artifi-"

"Yes, I know, but I can eat it, and I thought she'd enjoy seeing a genuine theaterdistrict deli. I'll bring her home afterward. Are you at your hotel?"

He wasn't, he was still at Radio City Music Hall. "The staff and I have been looking for her everywhere. I was about to call the police. Why didn't she tell me you were giving her a tour?"

"It was a simple case of miscommunication," I said. "She thought I'd told you, and I thought you were there when we discussed it." I went on, hoping he wouldn't remember we hadn't had any opportunity to talk alone, that he'd been there the entire time. "I am so sorry about the mixup, Dr. Oakes."

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"She still should have told me she was leaving," he said. "She should have known I'd be worried."

"How could she?" I said. "As you said, she doesn't have human emotions."

"But I specifically programmed her to-"

He wasn't going to let go of it. "You sound hoarse," I said. "Are you catching a cold?"

T probably am. I got drenched standing out front waiting for her. If I catch pneumonia because of this—"

"You poor thing," I said, summoning every bit of acting ability I'd acquired over the last twenty-five years in order to sound sympathetic. "Go straight home and get into bed. And have room service send you up a hot toddy. I'll take care of Emily and see she gets home safely," and after a few more disgruntled-parent sounds, he hung up.

"There," I said. "That's taken care of-"

"Are we really going to a deli?" Emily asked unhappily.

"No, not unless you want to I just told him that to keep him from coming here to the theater. Where would you like to go? Back into the theater? I think Benny's still here. He could let us in."

"Could we just stay here in the car?"

"Certainly," I said and told Jorge to pull in closer to the curb.

He did, and then got a plaid blanket out of the trunk and put it over Emily's knees.

"Oh, but I don't—" she began.

I shook my head at her.

She nodded and let him cover her knees with the blanket and drape his jacket around her shoulders. "Thank you," she said, smiling enchantingly up at him.

"Would you like something hot to drink?" he asked her as if he'd forgotten I was even in the car. "Coffee or—?"

"Oh, no," she said. "I'm afraid I can't—"

"She'll have cocoa," I interrupted, thinking how much I would give to be able to look as young and helplessly appealing as she did, "and bring me a coffee with a shot of rum in it. Not that mud they make at Dark Brew," I added. "Go to Finelli's." Which was six blocks away.

He trotted off obediently. "Good," I said. "Now we can talk. Tell me what's hap-

pened. You went to see the Christmas show at Radio City Music Hall..."

"Yes, and it's beautiful. It's huge, with gold curtains and chandeliers and statues

and this enormous stage—"

"I know. I've been there. You said something happened?"

"Yes, the show started and there was all this singing and dancing, and then the Rockettes came out. They're this group of forty dancers—there were originally sixteen of them, called the Roxyettes, who danced at the Roxy Theater, but when Radio City Music Hall opened in 1932, they were a big hit because of the way they looked on the stage—it's 144 feet wide—and they added twenty more dancers, and then four more, and they've been there ever since. They're all the same height, and they're all dressed alike—"

"I know what the Rockettes do," I said, but there was no stopping her. She was in

full spate.

"They've done over a hundred thousand shows, and in the 1970s they rescued Radio City Music Hall! It was going to be torn down, and they went out in their Rockette costumes and stood all around the building, asking people to sign petitions to save the building. All eighty of them stood out there. In the middle of winter, when it was snowing and everything—"

I waited for her to pause for breath and then realized that wasn't going to happen. I was going to have to break in and stop her. "The Rockettes came out, and then what

happened?" I asked.

"They formed this long, perfectly straight line. They were wearing these red lectards with white fur trim and hats and gold tap shoes. That's one of their traditional Christmas show costumes. They've been doing a Christmas show since 1933—"

At this rate, we could be here all night. I broke in again. "They formed a straight

line, and then what?"
"They linked arms and kicked their legs in the air at the same time." she said, her

eyes bright with excitement as she described it, "as high as their heads. And all the kicks were to exactly the same height."

Loaded "That's what the Rockettes are known for Their precision even light.

I nodded. "That's what the Rockettes are known for Their precision eye-high kicks."

"And then these skaters came out and skated on a pond—right on the stage—to the song 'A Simple Little Weekend—'"

From Bumpy Night.

"And then the Rockettes came out again in pale blue leotards with sequins on the top and silver tap shoes and kicked some more and then—"

Was I going to have to listen to a blow-by-blow of the entire show? "Emily," I said. "What exactly hap—?"

"And then they opened the curtain, and there was a toyshop, and the Rockettes came out dressed as toy soldiers, and they all fell down—"

The Rockettes were famous for that, too, the long line of ramrod-stiff soldiers collapsing like dominoes, one against the other, till they were all in a carefully lined-up nile on the stage.

"And then." Emily said. "they came out dressed all in silver with these square box-

es on their heads and flashing lights-"

Robots, I thought. Of course. In keeping with the theme of the Macy's parade and the department stores' Christmas windows.

"And they all tap-danced," she said breathlessly, "and turned and kicked, all exactly alike. And that was when I realized . . . when you asked me the other night what I wanted to be, I didn't know what you meant. By wanting to be something, I mean. But now I do." She looked up at me with shining eyes. "I want to be a Rockette!"

My first thought was, Thank God it's the Rockettes and not musical comedy! I wouldn't have to compete with that youthful innocence, that disarming enthusiasm.

My second thought was, How ironic! Dr. Oakes had brought her here specifically to convince people artificials weren't after their jobs, and now here she was announcing she wanted one of the most sought-after jobs in New York. She was now a threat to thousands of aspiring Rockettes, and tens of thousands of little girls in dance classes all over America.

It's his own fault, I thought. He should have known better than to let her see them. Eve him her they weren't dressed up like robots, they looked like them, with their identical costumes and long legs and smiling faces. And performed like them, their synchronized tap steps, their uniformly executed turns and time steps and kicks. Dr. Oakes should have known it was bound to dazel her.

Add to that her youth (and I wasn't talking about her sixteen-year-old packaging, I was talking about her lack of experience—and who has less knowledge of the world than a robot?) and the fact that every little girl who'd ever gone to see them had come out of the show wanting to be a Rockette, and what had happened was inevitable.

And impossible. In the first place, she was designed to do photo ops and interviews with unsuspecting dupes, not dance. And in the second place, Dr. Oakes would never let her.

"You can't be a Rockette," I said. "You told me yourself artificials aren't allowed to take humans' jobs."

ake humans' jobs." "But it's *not* a job!" she said passionately. "It's . . . jobs are tasks humans *have* to do

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to keep society functioning and to earn money to pay their living expenses. Being a Rockette is something totally different! It doesn't have anything to do with money. It's like a . . . a dream or a . . . a quest or . . . it's—"

"What I did for love."

"Yes," she said, and now I knew for certain she was stagestruck: she hadn't even noticed that was a line from a Broadway musical.

"But it's still a job," I said. "The Rockettes are paid—"
"They wouldn't have to pay me. I'd do it for nothing!"

"And even if artificials were allowed to take humans' jobs, there's still the problem of your height."

"My height?"

"Yes, you're too short. The Rockettes have a height restriction."

"I know. They're all the same height. How tall are they?"

"They're not actually all one height," I said. "That's an optical illusion. They put the tallest girls in the middle and then go downward to either end."

"Well, then, I could be one of the ends."

I shook my head. "No, you couldn't. You have to be between five foot six and five foot ten, or at any rate that's what it was when I auditioned to be a Rockette. It may have gone up since th—"

"You were a Rockette?" she squealed, and it was clear I'd just gone up several

notches in her estimation. "Why didn't...? It didn't say that in your bio."

"That's because I wasn't one. While the auditions were still going on, I got offered a part in the chorus of *The Drowsy Chaperone*, and I took it. It turned out to be my big break."

"But how could you give up being a Rockette? I wouldn't ever want to be anything

else!"

It didn't seem like a good idea to tell her I hadn't actually wanted to be a Rockette, that I'd only auditioned because I'd hoped it might get me noticed, or to tell her that when I'd heard I'd made the chorus of Chaperone, I'd walked out of the Radio City rehearsal hall without a backward glance.

"You have to tell me what I need to do to become a Rockette," she said, clutching

my arm. "I know you have to learn to tap dancing-"

"And jazz dancing and ballet. En pointe."

She nodded as if she'd expected that. "I can have those programs installed."

"A program of dance steps isn't the same as actually learning the steps," I said. "It takes years of training and hard work to become a dancer."

She nodded. "Like in A Chorus Line."

"Yes, exactly," I said. "But even if you had that experience, it wouldn't matter. You're only—what? Five foot two, at the most?"

"One"

"And the height requirement's five foot six," I said, hoping the appeal to logic would convince her what she wanted wasn't a good idea, as had happened when she'd wanted to be named Eileen. "You're simply too short."

She nodded thoughtfully.

"I'm sorry. I know it's disappointing, but it's all part of being in the theater. I didn't get the part of Fantine in the revival of *Les Mis* because I was too tall. And Bernadette Peters lost the part of—"

She wasn't listening. "What about bingo-bongos?" she asked.

"What?"

"Bingo bongos. Should I have them done?" and when I still looked blank, "in A Chorus Line. The 'Dance 10, Looks 3' number. Val said she had the bingo-bongos done." Indeed, she had. She'd been talking about having her breasts enlarged and her

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derriere lifted, or as she referred to it, having her "tits and ass" done, which I refused to explain to a dewy-eved innocent. Or a robot.

"It wouldn't do any good," I told her. "As I said, you're not tall enough to meet the height requirement.

"What did you do in the audition?"

She was too stagestruck to hear a word I was saying. "I'm trying to explain, you won't make the first cut for the aud-"

"What did you have to do?"

"They taught us a series of combinations, which we did in groups of three. And then if we made callbacks, we had to learn a full routine, with time steps and kicks, and do a tap solo."

"What did you do for your solo?"

"'Anything Goes.' But you won't get to do a solo. You won't even make the initial cut. You're too short. And even if you met all the requirements, you'd only have a minuscule chance of getting in. Hundreds of dancers audition every year, and only one or two make it. I'm not trying to discourage you, Emily," I said, even though that was exactly what I was trying to do. "I'm just trying to be realistic."

She nodded and was silent for a moment. "Thank you for all the advice, Miss Havilland. You've been most awfully kind," she said and was out of the car and splashing down the street through the rain, which was coming down harder than ever.

"Emily!" I shouted. "Wait!" but by the time I got the window down, she was half a

block away.

"Come back!" I called after her. "I know you're disappointed, but you can't walk home in this. Jorge will be back in a few minutes. He'll drive you home. It's late, and your hotel is miles from here."

She shook her head, flinging raindrops everywhere. "It's only forty-five blocks," she said cheerfully, and vanished around the corner.

Jorge, arriving moments later with two cardboard cups, was furious. "You let her

walk home in the rain?" he said disapprovingly. "She'll catch pneumonia." "She can't," I said, but he wasn't listening to me either.

"Poor kid," he muttered, pulling away from the curb with a jerk that spilled coffee

all over me, "Poor little thing!"

"Poor little thing" was right. Because even if she could charm the choreographer into waiving the height requirement (which wasn't entirely out of the realm of possibility, given her programmed-in charm), there was no chance at all of Dr. Oakes's allowing her to be a Rockette. It would undermine the image he and AIS were trying to convince the public of. Even her raising the possibility of being a Rockette would be too dangerous. He'll cut short their tour, and they'll be out of here on the next plane, I thought. If they haven't left already.

But the next morning, there she was on TV, smiling and waving from the foot of the Statue of Liberty and later from a horse-drawn carriage in Central Park, and on Monday night there was coverage of her charming the pants off a reporters and the TSA as she and Dr. Oakes went through security at LaGuardia on their way home, with no sign that she'd had her hopes dashed.

"Will you be coming back to the Big Apple soon, Emily?" one of the dozens of re-

porters asked her.

"No, I'm afraid not," she said, and there wasn't even a hint of regret in her voice. "I had a wonderful time here in New York! The Empire State Building and everything! I especially loved seeing Only Human."

Well, at least Torrance will be happy about her mentioning the play. I thought,

waiting to hear what she'd say about the Rockettes.

"What did you think of the Radio City Christmas show?" the reporter asked.

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She smiled winsomely. "I loved the nativity scene. They had real camels and everything!"

"Where do you go next, Emily?" another reporter asked. "Back to San Jose?"

"Yes, and then we'll be in Williamsburg for Christmas."

"And then L.A. for the Rose Bowl parade," Dr. Oakes said. "You're really looking forward to that, aren't you, Emily?"

"Oh, yes," she said, dimpling. "I love flowers! And football!"

"One last question," the reporter said. "What was your favorite part of your visit?" Here it comes. I thought.

"Meeting Claire Havilland. She's such an amazing actress!"

I suppose I should have been grateful to her, especially when Torrance called the next day to tell me Only Human was sold out through Easter and three days later to say Austerman wanted to have lunch with me to talk about Desk Set.

But I wasn't. I was suspicious. That touching little scene in my car had obviously been just that—a scene, performed by a very skilled actress—and she hadn't fallen

in love with the Rockettes at all.

But then what had its purpose been? To soften me up like Eve Harrington's madeup story about seeing Margo Channing perform and falling in love with the theater, so that she could worm her way into my life?

I half-expected her to be in the audience on Tuesday night, in spite of the La-Guardia scene, but she wasn't, and on the way home after the show, Jorge told me there'd been a story on the radio about their arrival in California.

"Did she say anything about the Rockettes?" I asked him.

"No. She didn't say anything about your making her walk halfway across Manhattan in a rainstorm either." He glared at me in the rear view mirror. "You're lucky she didn't catch her death of cold."

She wasn't in the Saturday matinee audience either, or backstage after the show, and by the middle of December I had more important things to worry about, like Austerman's insistence on a dream-sequence number in *Desk Set* with me in, you guessed it. a leotard and fishnet stockings.

Add to that the management's decision to add an additional matinee to the schedule because of increased ticket demand, Austerman's wanting me to help audition the Spencer Tracy role, and every reporter in town wanting to do an interview on Only Human's Tony nomination prospects. By mid-December I was exhausted.

Which was why I was taking a nap in my dressing room before the show when Benny the stage manager knocked and said there was someone to see me. "A Cassie

Ferguson," he said. "She says she knows you."

"Cassie what?" I said blurrily, wondering if that was the name of Austerman's assistant. "What does she look like?"

"Blonde, tall, hot."

All of Austerman's assistants were tall, blonde, and hot. He was as bad as Miss Caswell's producer boyfriend. And if she was from Austerman, I couldn't afford to let her see me like this. The nap had added ten years to my face. "Tell her I'm doing an interview with Tiger Beat and I'll meet with her during intermission."

He looked unhappy. "She said she needed to see you right away."

"Oh, all right," I said. "Give me five minutes and then send her in," and frantically started to repair my makeup, but almost immediately there was a second knock on the door.

Benny was right. She was a knockout: tall and leggy, with gorgeous long blonde hair, and, even though she was wearing a belted raincoat, it was obvious she had a great figure.

"Well?" she said. "What do you think?"

"Emily!" I said, staring. "My God! What-?"

"I had the bingo-bongos done," she said happily.

"I can see that."

"I was just going to get longer legs, but the proportions didn't look right, so, since I had to get a new torso anyway, I thought I might as well get a new ass, like in the song, and new—"

"But why?" I said.

"To meet the height requirement," she said, as if it were self-evident.

Oh, my God, I thought. She was serious. She's going to try to become a Rockette.

"The upper limit's five ten and a half," she said, "but the median of the current Rockettes is five nine, so I went with that and with thirty-six for my chest. I did a C so I could be sure I'd fit in a size six—that's the most common size costume. And people tend to be less intimidated by flatter-chested girls."

She untied the belt and opened her raincoat wide to reveal a spaghetti-strapped

black leotard and sheer tights.

"Hot" was an understatement. She had definitely had the bingo-bongos done.

It was too bad Torrance wasn't here. "This," I would have told him, "is what one is supposed to look like in a leotard. Which is why I have no intention of wearing one in Desk Set or anywhere else."

"Do you think I should have gone with a D instead?" Emily asked.

"No," I said.

"What about my outfit? Is it all right for the audition? I analyzed audition videos and photos from the past ten years, and this was the most common, but some of the dancers wore colored leotards or leggings, and I was wondering if I should do that to make them notice me."

"Trust me, they'll notice you," I said.

"What about my shoes?" she said, sticking out her foot and pointing a toe in a Tstrapped black tap shoe. "The audition brochure said character heels, but I didn't know if I should wear black or beige."

"Black," I said. "But auditions aren't till summer."

"I know, but they have a vacancy they need to fill."

Good God, I thought. She's killed a Rockette, and she must have guessed what I was thinking because she said, "A Rockette on one of the tours quit to get married, and they had to replace her with one of the New York troupe, so they're holding a special audition."

"But you have to know how to tap dance—"

"I do," she said. "And I've learned jazz, modern, and ballet. Here, I brought an audition tape." She pulled out an Android, swiped through several screens and handed it to me.

And there she was, tap-dancing, executing flawless time steps and cramp rolls and Maxie Fords—and the eve-high kicks the Rockettes were famous for.

"I've had all the choreography terms programmed in, and I've memorized three different routines for my audition solo—'Anything Goes' and 'One' from A Chorus Line and 'Forty-Second Street.' Which one do you think I should do?"

"Emily-"

"I learned all the routines from the Christmas show, too, but I wasn't sure I should do one of those," she said. "Oh, and what about my hair? Is blonde okay? Sixty-two percent of the Rockettes are blondes."

"Blonde is more than okay," I said.

"And you think I look like a Rockette?" Like the perfect Rockette. "Yes," I said.

"What about my face? The age requirement's eighteen, so I had it altered to look older-"

She had. Her cheekbones were more defined, and her face thinner, though it was still recognizably Emily's and had retained the wide, innocent eyes and the disarm-

ing smile.

"-But I was wondering if I should change it to look more like the other Rockettes. I made a composite of the current troupe's faces, and it has a straighter nose and fuller lips." And much less vulnerability. I thought, A-modern-woman-in-Manhattan-who's-

had-lots-of-bad-experiences-and-worse-boyfriends face. The idea of Emily with that face was unthinkable.

And besides, if she was actually going to try and become a Rockette, she would need all the help she could get. And her face was her biggest weapon. Well, not her biggest, I thought. But definitely a weapon, as witness the reporters' behavior at that backstage interview. And Jorge's.

"What do you think?" Emily asked, "Should I change my face?"

"No." I said, "Absolutely not." and posed the question I should have asked in the first place, especially since he was liable to come bursting in here any minute, "What does Dr. Oakes say about all this? Did he authorize these changes?"

"No, of course not," she said, "He'd never let me do this, I got some of the engineers to help me."

How did you talk them into it? I was about to ask and then realized I already knew. She'd charmed them just like she'd charmed Jorge and the TSA.

"And Dr. Oakes didn't object?" I asked instead.

"He doesn't know about it. He's in Japan with Aiko."

Of course, I thought, He's off introducing his artificials to other countries. And different cultures would have different ideas of what was threatening about artificials. They'd require different models, all with faces and names carefully chosen to make them seem harmless: an Aiko even shorter than the original Emily for Japan and a Rashmika for India, a Mei-Li for China,

And meanwhile his American model had turned into a cross between of Eliza

Dolittle and Frankenstein's monster.

"I'm not sure you're right about my keeping the face," she said. "What if one of the Rockettes recognizes me? I met some of them that night at Radio City Music Hall." And they'd have seen her on the news or in that interview with me. "So you were

planning to audition as Cassie somebody?"

"Ferguson. Yes, because the rules say you have to be at least eighteen years old. and I'm only one."

One. But what a one! "Definitely a singular sensation," I murmured under my breath. "You don't think I should do that?" she asked anxiously, "I know it's lying, but if

they know I'm an artificial-"

They'll never let you audition, I thought. They'd have exactly the same reaction I'd had, and Emily was even more of a threat to them than she had been to me. As Torrance had said, actresses get where they are by being one of a kind, but with the Rockettes, sameness was the whole point.

And the Rockettes weren't stupid. They'd see instantly that if one of them could be replaced, all of them could, and that once the management realized they could have Rockettes who didn't want health benefits or time-and-a-half for overtime, it would

be all over.

So she was going to have to lie and tell them she was a human. But she'd never get away with it. Even if she managed to fool them at the audition, she wouldn't make it through her first rehearsal. She didn't sweat, she didn't get out of breath, she didn't make mistakes. And she could learn an entire tap routine by watching it once. They'd spot her instantly.

Emily was watching me with a worried expression, "You don't think I should tell

them I'm human?"

"I don't know. Let me think," I said, wishing I had Emily's computer brain to help me figure out what to tell her. I knew what I should tell her: the cold hard truth. That there was no way she could ever be a Rockette and she should go back home to San Jose and do what she'd been designed to do.

It would be much kinder than letting her batter herself to death trying, like a moth against a porch light. But I also knew she wouldn't listen, any more than I had

when I was eighteen.

"What do you think?" Emily was asking me. "Should I put 'artificial' on my audition form?"

"No," I said. "You're not going to audition."

"But you can't become a Rockette if you don't audition."

"Only if you're an ordinary human," I said. "When does Dr. Oakes get back from

"Not till the twenty-second. That's when we were supposed to go to Williamsburg

for Christmas."

The twenty-second was a week away, but we didn't actually have that much time. AIS would already be looking for Emily. Multinational corporations don't just let a valuable piece of equipment walk away, especially one who was ruining any hope they had of selling the idea of artificials to the public.

On the other hand, they could hardly let it get out that one of their "perfectly harmless" robots had gone rogue. They'd have to look for her through private channels, which would slow them down. And even if they did decide to go public and had the police put out an APB on her, they'd be looking for a five-foot-one sixteen-year-old with light brown hair, which gave us a little time.

But the minute Emily went public, they'd come after her and Dr. Oakes would be on the first plane home from Japan. So we'd have to make sure that by the time he

got here he wouldn't be able to do anything.

"All right, Emily," I said. "Here's what we're going to do. You're going to go on every news and talk and late-night show we can find and tell them how much you want to be a Rockette. You're going to tell them all those things you told me that night in the limo, how the Rockettes started and what they've done over the years—dancing in the Macy's Parade and saving Radio City Music Hall. And you're going to tell them all the things you've done so that you could become a Rockette—how you learned to dance and memorized the routines and studied their history. We're going to convince them you deserve to be one of them."

That wasn't quite true. What we were going to do was convince the *public* she deserved to be a Rockette and hope the resulting pressure would force the Rockettes to let her in. "Do you remember the names of the talk show hosts who interviewed you

when you were here for the Macy's Parade?" I asked her.

"Of course."

Of course. "Good. I want you to make a list of them and how we can contact them."

"Do you want me to call them and set up interviews?"

"No, we don't want anyone to know where you are till you show up for the interviews. In going to send you to my apartment—Jorge will take you—and I want you to use my computer to find some photographs of Rockette costumes. Preferably one of their Christmas costumes—if we can tie this in with Christmas, it will help. People love Christmas stories with happy endings. Find a photograph, and then call Jorge and have him come and get it and bring it back here to our wardrobe mistress—"

"Why?"

"So you can wear it to these interviews. We're going to arrange for you to dance as part of your appearances. You can do one of the routines you learned."

"But-"

"I know, it won't be the same as doing the routine with the Rockettes, but it's a way to show them what you can do. Think of it as your audition. You can do that, can't you?"
"Of course," she said. "It's just that a photo's not necessary. I've already made all

the costumes."

"All the . . . you made all the costumes in the Christmas show?"

"No. I made all the costumes the Rockettes have ever worn."

The plan worked even better than I'd envisioned. Emily went on all the shows and tapped and talked her way into their audiances' hearts, modeling an array of outfits from the costume of the original Roxyettes to Bob Mackie's 'Shine,' with its three thousand Swarovski crystals, to the merry-go-round horse costume the Rockettes had worn at the "last" performance, when it had looked like Radio City Music Hall would be torn down, and regaling her enraptured hosts with little-known facts about the Rockettes: that before coming to New York, they had danced in St. Louis as the Missouri Rockets; that in the days when they danced between movie showings, they had practically lived at Radio City Music Hall, sleeping on cots and eating at a special canteen set up for them; that in the open competition at the Paris Exposition, they had defeated the Russians and the corps de ballet of the Paris Open.

"Lucille Bremer was a Rockette," she told them. "You know, Judy Ĝarland's older siter in *Meet Me In St. Louis*, and Vera Ellen, from *White Christmas*, but she kept showing off. A good Rockette never tries to stand out. She tries to dance just like

every other Rockette."

And on every show and podcast she told the story of how the Rockettes had saved Radio City Music Hall, standing outside and asking passersby to sign a petition to make the building a national landmark. "They went on TV and radio shows just like this one to plead their cause," she said, "and they all testified at the Landmark Commission Hearing. They did a kick-line with the mayor on the steps outside."

The audiences ate it—and her own eye-high kicks—up, and her appearances became instant YouTube hits. One, in which she talked reverently about why being a

Rockette meant so much to her, went viral.

The only hitch was Torrance, who thought I was taking a huge risk by helping her. "It's dangerous," he said. "There's a lot of hostility to artificials out there. Some of it could spill over to you, and then there goes your Tony nomination."

"I thought you were the one who was convinced Emily was harmless," I said.

"That was before she decided she wanted to be a Rockette," he said disgustedly.

"And why are you so set on helping her? I thought you hated her."

"I just didn't want her trying to steal my career. And if she gets to be a Rockette,

she won't be, and Jeannette will be safe."

stranding her in Vermont so she could take her place.

"Jeannette? Who's Jeannette?"

"The role I have been playing eight times a week for the past year," I said. "A fact that Emily would know."

"And that's why you're helping her? Because she knows what parts you've played?"
"Yes. And because if I get that Tony nomination you're so worried about me losing,

it will be thanks to all the publicity Emily gave me. I'm just repaying the favor."
"Ha!" he said. "You know what I think? I think you orchestrated this whole PR

thing to set her up."

Like Eve Harrington had set up Margo Channing, siphoning gas from her car and

100 Connie Willis

"Are you sure you didn't put her on all those TV shows so Dr. Oakes would find out

where she is and take her home?" Torrance asked.

And if I did, wouldn't that be a good thing? And not only for me, for everybody else who happens to be "only human." I mean, she can rattle off the names of every play and musical and movie ever done and their cast lists and their song lyrics and librettos and dance routines and scripts. And when she was asking all those questions about what to wear to the audition, she'd said, "Should I wear my hair in a topknot?" "No, a ponytail," I'd told her, "With a rose scarf to bring out the color in your

cheeks."

"Should I make them pinker?" she asked, and she wasn't talking about makeup.

How can anyone compete against that? Or the fact that she'd never miss a step. Or forget her lines. Or get old.

Torrance was right. She is dangerous.

But I didn't say that, I said, "I'm just trying to help her, And me, If she's a Rockette, she can't steal Bunny out from under me.'

"Bunny?" he said, looking confused, "Is that Margo Channing's husband? The one

Eve tries to steal?"

"No. It's the lead in Desk Set. The musical Austerman's doing?" I said wryly. "Ring a bell?"

If they turn her down for the Rockettes, I thought, I'm firing Torrance and making

her my manager. But it didn't look like they'd turn her down. After only two days of appearances, the public and press response to Emily was overwhelmingly positive, and the Rockettes who were questioned by reporters as to what they thought of her chances said things like, "She knows more about the Rockettes than we Rockettes do," and "I don't know. I mean, I'm worried about artificials taking over and everything, but she wants it so bad!" and I thought, Good God, she's actually going to pull it off.

So it was a shock when she showed up after the Wednesday matinee. "I thought

you were doing The View," I said.

She shook her head, looking so pale I thought her sensors must have malfunctioned. "They just changed the rules for being a Rockette so I don't qualify," she said.

"Then you'll have to do what you did before." I said firmly. "Change yourself so you do meet them."

"I can't." she said and showed me the new rule.

"No artificials," it read. Only humans need apply, I thought.

"Then we have to make them change the rule." I said.

"How?"

"We're going to make them look like monsters for picking on a sweet, harmless child like you. Do you remember the party scene from Bumpy Night? Where Margo Channing tries to expose Eve and says all those terrible things to her?"

She nodded.

"And do you remember how it backfired? How it made Margo look like a bully and Eve look like a victim? Well, that's what we're going to do, Can you cry?"

"No, but I can look really sad."

"Good. You're going to do that. And you're going to look helpless, and victimized. I want you to go watch All About Eve and memorize Eve's tone of voice and mannerisms while I write the script you're going to follow. You never wanted to hurt anyone or cause any trouble. You just admire the Rockettes so much!"

"But-" Emily said, looking up at me with those wide, innocent eyes. "I don't want

to be Eve Harrington. She's not a nice person."

"Let me tell you a little secret, Emily," I said. "Nearly every actress is Eve Harrington at some point or other and has lied about her age or used her feminine wiles

All About Emily 101 or taken unfair advantage to get a part. How do you think Margo Channing knew what Eve was up to?" I asked her. "Because when she looked at her, she recognized herself."

"Did you ever do anything like-?"

"Of course, I lied about my age and my Off-Broadway experience when I tried out for Love, Etc. And when I found out they'd moved the audition time up, I didn't tell anybody." And I had slept with the director.

"But I got what I wanted," I said. I looked at her. "How much do you want to be a

Rockette?"

And Dr. Oakes was wrong. He'd said his artificials had been designed to lack initiative, drive, preference. But once you wrie in preference, even if it's only the ability to choose one word, one gesture over another, everything else comes with it. And when he'd put in safeguards against all those driving forces—lust and greed and ambition—he'd forgotten the most dangerous one of all, the one that overrides all the others.

Torrance wasn't the only one who could have benefited from watching a few musicals. If Dr. Oakes had seen A Chorus Line, this never would have happened. And he'd have known what was going to happen when I asked Emily what she was willing to do to be a Rockette.

"Well?" I said, repeating the question. "How much do you want to be a Rockette?"

She raised her artificial chin and looked steadily at me. "More than anything else in the world"

She wanted to know how we planned to make the Rockettes management look like bullies.

"Do you remember how the Rockettes saved Radio City Music Hall?" I said. "Well, you're going to make them make you a Rockette the same way. What's the weather like this week?"

"A high of twenty degrees Fahrenheit with a rain-snow mix."

"Good," I said, remembering her standing outside my car in the rain, shivering and bedraggled. "I want you to wear the skimpiest Rockette costume there is, preferably something with a feathered headdress. And mascara that runs. And I know you don't wear mascara," I said before she could interrupt me. "But you're going to wear it for this. You're going to stand out there twenty-four hours a day looking half-frozen, asking people to sign a petition to make them change the rules so you can be a Rockette, and I'm going to see to it the media's there to film it."

I picked up the phone to call Torrance and have him arrange for the camera crews.

"But they know artificals can't feel cold or heat-"

"It doesn't matter, trust me," I said, thinking of Jorge, who still wasn't speaking to me. "I want you to shiver and do the teeth-chattering thing, and when passersby ask you if you're all right, you need to say, 'Yes, I'm just so cold!' and ask them to sign your petition."

"But won't the rain-snow mix run the signatures?"

"Yes, which is even better. It'll look like tears."

"But-"

"This isn't about getting signatures. It's about making the Rockettes management look like bullies."

"But I don't see how ... Margo said mean things to Eve...."

"And they're making you stand outside," I said. "At Christmas. In the rain. Trust me, they'll look like bullies. And people don't like to look like bullies—or like the kind of people who'd let a historic landmark be torn down. They like to see themselves as the hero who rescues the building—or damsel—in distress. You stand out there in

the rain in a skimpy strapless costume, and by Friday the Rockettes will be begging you to join them. And if it starts snowing, we'll have action by Thursday."

It didn't take even that long. When I called Torrance the next morning to ask him when the film crews were going to be there, he said. "There's no point in sending them. It's all over."

"You mean, they got rid of the 'no artificials' rule? That's wonderful!"

"No," he said. "I mean she's over wanting to be a Rockette."

"Over?

"Oakes reprogrammed her."

"Reprogrammed her," I repeated dully. "When?"

"This morning. I thought you'd be pleased. It means you won't have to worry about her poaching your career anymore. Oh, and speaking of your career, Austerman called and said this'll be great publicity for *Desk Set*. You know, "Only Human' Actress Sends Artificial Packing.' He said it'll make you a shoo-in for the Tony nomination. So it's just like the ending of *Bumpy Night*, only this time Margo wins the Tony, not Eve."

"It wasn't a Tony," I said. "It was the Sarah Siddons Award, which you'd know if

you ever watched the play." Like Emily did, I thought.

"I don't know what you're so upset about," Torrance said. "She changed her height and her measurements and her hair color. This is no different."

Yes, it is. "Did they erase her entire memory?" I asked. "When they reprogrammed

her?" All those plays and cast lists and lines, all that Rockette history.
"No, no, nothing like that," Torrance said. "According to Dr. Oakes, they just made
a couple of adjustments to her software. They tamped down the preference thing so
she wouldn't have such a strong response to the Rockette stimulus and adjusted her
obstacle-to-action ratio. But she's still the same Emily."

No, she's not, I thought. The real Emily wanted to be a Rockette.

So here I am, standing in a freezing snow-rain mix in the leotard and fishnet stockings I swore I'd never be seen in, plus the trademark maroon-and-gold Rockette cap, which is doing nothing at all to keep the rain from dripping down the back of my neck.

I am clutching a clipboard for warmth and trying not to shiver convulsively as I accost passersby and attempt to get them to sign a petition to get Emily's software put back the way they found it and the Rockettes' rules changed so she can have a shot at her heart's desire.

And yes, I know artificials don't have hearts, and what about all the human girls out there between five foot six and five ten and a half with tap, jazz, and ballet expe-

rience whose job she'll be stealing?

And yes, I know I'm probably also opening the floodgates to a horde of robots whose dream it is to be ballerinas and neurophysicists and traffic controllers, and that I'll go back to my dressing room some night in the near future to find some disarming young woman who's the spitting image of Anne Baxter and wants to be my assistant, and I'll be really sorry I did this.

But I didn't have any choice. When I announced I wanted to be on Broadway, my mother told me I'd be mugged and raped and pushed onto the subway tracks, my father told me I'd end up broke and waiting tables, and the first three agents and five directors I auditioned for told me to "go back to Kansas and get married, sweetheart." Everybody had done everything they could think of to talk me out of it.

But they hadn't had me lobotomized. They hadn't cut out my stagestruck heart and replaced it with one that would have been willing to settle down in Topeka and have babies. Or adjusted my obstacle-to-action ratio so I'd give up and go home.

So here I stand, trying to blow some warmth into my frozen fingers and wishing I'd worn a warmer costume and that my skin turned rosy like Emily's when it gets

It doesn't. When cellulite gets cold, it turns a mottled purple and ash-gray. The rain's washed away every bit of my age-defying makeup; I've completely lost my voice from calling to passersby to come sign my petition, so heaven knows how I'm going to get through tonight's performance; and Torrance dropped by a few minutes ago to tell me I was making a fool of myself and jeopardizing the Desk Set lead and the Tony.

And in three days out here I've collected signatures from exactly eighteen people. including Torrance (I told him if he didn't sign it, I was getting a new manager), Jorge (who said sternly, "Now you know how it feels to be made to stand out in the freezing cold,"), and a couple of teenagers who didn't care what they were signing so

long as it got them on TV.

But the camera crews left an hour ago, driven inside by the icy rain and the fact that nothing was happening, and now it looks like it's going to snow, so the only thing that will bring them back is the discovery of my huddled, frozen body in a snowdrift. Even the tourists are giving up and going home. In a few minutes the only people left on the premises will be the Rockettes, and I haven't seen hide nor hair of them since I started this. They must be going in and out a door on the other side of the building to avoid me.

No, wait, here comes one out the same side door Emily used that night she ran away to talk to me. The young woman's definitely a Rockette. Her coffee-colored legs are even longer than Emily's, and she's dressed like a Christmas present, with a wide candy cane-striped red and green sash slanting over one dark shoulder and tied in a Christmas bow at her hip.

She looks cautiously around, and I think, disappointed, She's just sneaked out for a cigarette, but no, after a second look around, she shuts the door silently behind her and hurries over to me, her character heels tap-tap-tapping on the sidewalk.

"Hi, my name's Leonda," she says, hugging her arms to her chest. "Brr, it's cold out

"Did you come out to sign my petition?" I ask hopefully. The Rockettes resisted hiring minorities for a long time. They claimed audiences would be distracted if the Rockettes didn't all look exactly alike, including the color of their skin, and (according to Emily when she did the Today show) they'd resisted doing the right thing till 1982, when they'd finally hired the first African-American and, three years after that, the first Asian-American. Maybe Leonda had heard Emily say that and decided she had to do the right thing, too, even if it did mean risking her job.

Or not.

"Oh, no, I can't sign it," she says, glancing anxiously back at the side door. "I just wanted to tell you what a wonderful actress I think you are, Miss Havilland. I saw you in The Drowsy Chaperone when I was a little girl, and you were amazing!" She looks at me with starry eyes. "Seeing you was why I decided to be a dancer, and I was wondering if I could have your autogr—?"

"Leonda!" someone shouts from the door.

Another Rockette, dressed as a toy soldier, is leaning out, frowning. "What are you doing?" she says. "You've got to get changed! It's almost time!"

"I was just . . . sorry," she says to me and runs back to the door, her taps echoing on

the wet payement.

"I'll give you my autograph if you'll sign my petition," I call after her, but she's already gone back inside, and it's clear they aren't going to rise to the occasion like they did when Radio City Music Hall was about to be torn down. Or maybe Emily was wrong about them, and they weren't wonderful. Maybe they hadn't been trying to do something noble after all. They'd just been trying to hang onto their jobs.

And of course now that the two Rockettes are gone, a TMZ reporter and a cameraman with his videocam wrapped in plastic to protect it from the rain show up, looking annoyed. "Where are the Rockettes?" the reporter demands. "We were told to get

over here because something was going on. So where are they?"

"There was one here just a minute ago," I say, but that's clearly not good enough, and to add insult to injury, a cab driver going by rolls down his window and leans out into the rain to shout, "Traitor! What the hell are ya doin' standin' out there trying to get a robot a job? Why don't you stick up for your own kind, lady?" and of course the cameraman's getting it all.

"That's First Lady of the Theater to you!" I shout back at the cabbie, and he waves

a hand dismissively and drives off.

"How do you answer that question?" the reporter asks, sticking a microphone in

my face. "Why aren't you sticking up for your own kind?"

"I am," I say. "I'm sticking up for the Rockettes and for the theater. They've always stood courageously for doing what's right," a speech that would have been more impressive if I thought it was true. And if my teeth weren't chattering. "I'm also, in spite of what you think, standing up for the human race. If we're going to make humanity such a hard show to get into, then we'd better make sure it's worth auditioning for by acting the way humans are supposed to."

"Which is?"

"Humane."

"And that's why you're doing this," he says skeptically.

"Yes," I tell him, but I'm lying. I'm not doing this to defend a noble cause, or because Emily looked like Peggy in 42nd Street or the poor, doomed heroine of Our Town.

I'm out here ruining my voice and my chance at ever getting a decent role again because that night in my limo, sitting there in her drenched coat, pouring out her nonexistent heart about tap steps and precision kicks, she had looked like me.

And I realize for the first time that that's why Margo Channing helped Eve Harrington. Not because Eve manipulated her into it, but because when she looked at

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All About Emily 105

her, she saw her younger, stagestruck self, that girl who'd fallen in love with acting,

who just wanted a shot at doing what she'd been born to do.

If they ever do a revival of *Bumpy Night* and I get to play Margo again, I'll have to

remember that. It could add a whole new dimension to the character.

But at this point, getting the part—or any part, even Mama Morton—looks extremely doubtful. The reporter wasn't at all impressed with my "proud tradition of the theater and humanity" speech. For the entire length of it, he was looking past me, scanning for possible Rockettes.

But they're not going to show, and the reporter's apparently reached the same conclusion. "I told you they were getting us over here for nothing," he says to the cameraman

The cameraman nods and lowers the plastic-covered camera from his shoulder.

"Let's go," the reporter says. "I'm freezing my balls off out here."

"Wait," I say, grabbing his arm. "Won't you at least sign my petition before you go?" But they're not listening. They're looking over at the side door, which is opening again.

It's only Leonda, I think, back for a second try at an autograph, which she is not going to get. But it's not. It's the Rockette who yelled at her before. She's changed out of her toy soldier getup into the Rockettes' signature red and white fur Christmas costume, and, as we watch, she pushes the door wide, braces it open with her gold-shod foot, and makes a beckoning motion to whoever's inside.

And out comes a Rockette dressed just like her who's . . . oh, my God! Holding a clipboard. And on her heels is another Rockette. And another. And Leonda, who as she passes me turns her clipboard so I can see the petition and whispers, "I'd already signed mine. That's why I couldn't sign yours," and smiles a smile almost as sweet and disarming as Emily's.

"Are you getting this?" I ask the cameraman, but of course he is. Because what a glorious sight! They march out, heads up, chests out, as oblivious to the frigid wind as if they were Emily, even though I know it's cutting right through those tights,

right through the toes of those gold tap shoes.

Here they come in a gorgeous, unending line that is going to go all the way around the building, every one of them in red lectards and white fur hats. And TMZ isn't the only one getting this. Other camera crews are arriving every minute, and so are tourists, holding up their cell phones and Androids to record this. Taxi drivers are slowing down to whistle and cheer, Jorge shows up with a cup of hot brandy-laced coffee for me, and even though all the Rockettes aren't even out the door yet, people are flocking around them, wanting to sign their petitions. And mine.

The only thing that could make this a better finale is if it would start snowing, which it does just as the last of the Rockettes step smartly out the doors. Starry white flakes fall on their white fur hats, their eyelashes, as they move into position,

and their cheeks are almost as pink as Emily's.

They take up their places, eighty Rockettes and—I find out later—thirty-two former Rockettes and every female dancer from A Chorus Line, Forbidden Planet, and Almost Human. And the chorus line from La Cage aux Folles. And they all stand there, backs straight, heads held high, facing into the bitter wind that seems always to be whipping around Radio City Music Hall, with their petitions and their fabulous legs and their knock-em-dead smiles. And right now even I want to be a Rockette.

They're all in place now, every last one of them dressed in golden tap shoes and a red and white fur costume. Except for me. And the last eight out the door, who station themselves on either side of me, right beneath Radio City Music Hall's chrome-and-neon marquee.

They're dressed as robots.

BLOODSHOT By Cherie Priest Spectra, \$15.00 (tp) ISBN: 978-0-345-52060-9

riest, who made the awards ballots last year with her steampunk-cumzombies *Boneshaker*, tries another genre with this tale of a vampire who makes her living as a high-level thief who steals to order.

The protagonist is Raylene Pendle, who became a vampire in the jazz age. As the novel opens, she is living in Seattle, staying largely out of the public eye and making excursions into the city only to ply her trade. The problem begins when she goes to the warehouse where she keeps her spare loot and finds that someone has broken in. She takes appropriate steps, then finds out she's in much deeper trouble than she originally thought. One of her business contacts puts her in touch with another vampire, this one a somewhat older male named Ian Stott, who is blind. He says he has been imprisoned and made an experimental subject by a rogue government agency, where he lost his sight. He asks her to help him find paperwork that may help a doctor cure him.

But before she can even start the search, there is another break-in at her warehouse-this time by an armed team. That's a problem because Ravlene's warehouse has two kids living in it-strays she's become somewhat protective of. Somebody is causing her more trouble than she likes, and she definitely doesn't want the kids caught up in it. After doing what she can to get the kids safe, Raylene goes on an odyssey to various parts of the country, checking on safe houses she has set up and following clues to the blind vampire's questwhich turns out to be connected with the hreak-ing

Along the way, we get looks at several rural and urban settings, with a lot of the climactic action taking place around Atlanta and Washington, DC. (Makes sense for something that's going to get pigeonholed as 'urban fantasy' to spend some time in cities, right?) The different settings are all effectively portrayed, and each has a distinctive feel—hard to do effectively with just one city, but a real treat to see happening with several.

The book is also very much an in-yourface defiance of convention. With the protagonist a thief, a very casual killer, and a vampire subsisting on human blood, it's no surprise that she has a somewhat unconventional attitude toward established society. But Priest ups the ante by making most of her sympathetic characters just as much outsiders as Raylene herself.

The plot is interestingly complicated, and Raylene shows a nice combination of toughness and ingenuity—with a nicely dark sense of humor, for a bonus. The book ends with plenty of material laid on the table for one or more sequels, if Priest is so inclined. It'd definitely be fun to see them

KINGS OF THE NORTH By Elizabeth Moon Del Rey, \$26.00 (hc) ISBN: 978-0-345-50875-1

Moon continues her followup to "The Deed of Paksenarion," a trilogy that first put her on the fantasy map two decades ago. In this second book of the new trilogy, which began with Oath of Fealty, Moon examines the careers of several of Paksenarion's companions. The main focus here is on two of them: Kieri Phelan, the new king of Lyona, and Dorrin, now Duke Verrakai, who after assuming her title has discovered her family's inhuman past as evil magicians.

The previous volume showed the protagonists coming to terms with their new levels of responsibility. Now the powers of evil are beginning to show their hand, and the level of conflict has accordingly secalated. Kieri becomes aware of probing raids from the north, and eventually he is forced to journey north to meet a representative of that kingdom.

Kieri has a couple of nagging internal problems, as well. First off, his kingdom is divided between human and elvish populations. Kieri's mother, the queen of the elvish half of his kingdom, is ignoring his attempts to enlist her in the running of the realm. Somewhat less critically, but definitely nagging, is that his people are clearly impatient for him to marry and start a family. Having tragically lost the love of his life, he is reluctant to plunge back into the marriage game.

The answer to Kieri's marriage problem appears in an unexpected form and it brings along its own series of complications and conflicts. The choice pits Kieri against his mother, who objects on grounds that seem irrational to the king, but that bear considerable weight to his chosen one, who decides to defuse the problem by absenting herself from the court. She flees in the direction of Verakkai, where Dorrin helps her find the right course of action.

Meanwhile, Dorrin has rid her dukedom of the remnants of her ancestors. evil magicians who stopped at nothing to gain power. Now she has taken on a group of squires, sons and daughters of nobles in the capital city of Vérella. whose young king is her feudal lord. She welcomes their presence, because she has also assumed the obligation of raising a bunch of younger members of her family—who if she hadn't come along would almost certainly have fallen prey to her wizardly relatives. These relatives have perfected a way of inserting themselves into the body of another, either as a disguise or as a way to extend their lives past the normal range. She kills two birds with one stone by giving some of the babysitting chores to the squires.

And in the midst of these domestic problems, the larger political situation suddenly shifts into emergency mode. The book ends with the broad lines of the conflict for the third volume clear, but the path to resolving that conflict is still to be revealed. It promises to be a rousing conclusion.

Moon's fantasy world is enriched by the author's personal experience—as a Marine and a Texas rancher. She has considerable first-hand knowledge of the ways of military units and of life without an excess of high-tech comforts. This experience gives her work a depth of detail that many other writers lack.

#### WEIGHT OF STONE By Laura Anne Gilman Gallery, \$24.99 (hc) ISBN: 978-1-4391-0145-2

The second volume of Gilman's Vineart War builds on the world created in the first, in which magical power arises from the process of winemaking.

The first volume of the series ended with Jerzy, an apprentice vineart or wine mage who has shown flashes of rare talent, and his companions, the trader Ao and Mahault, daughter of the maier of Allepan, taking to the road after Jerzy's mission to Allepan falls afoul of the church. Now the three have begun their court for names.

quest for answers. There are a couple of problems. First of all, the all-powerful church is on their trail. The charges against Jerzy-essentially, dealing in forbidden magic-are enough reason to believe that the pursuit will not be perfunctory. But the bigger problem is an apparent breakdown of the magical order everyone has taken for granted. Sea monsters have been attacking coastal towns. Vinearts have been discovered dead among their vinescause unknown, but likely some kind of hostile action. At the same time, they come into contact with Kainam, once heir to the rule of an island kindom in the southern seas. His country has also been affected by the strange new tides of magic, with his island home surrounded by a

field of magical invisibility so as to isolate it from enemies. With his expert help, they take to the water, exploring several nations around the rim of a sea that bears considerable resemblance to the Mediterranean.

They finally wind up in a country not even Ao has heard of, where they meet a vineart who seems hospitable—until the real masters of the country reveal themselves. Jerzy, who has been gradually finding out the true extent of his magical powers, is suddenly put to a harsher test, with survival the stakes.

As is often true of second volumes of trilogies, this one spends a fair amount of time getting to know the full extent of the fantasy world; Gilman has created several societies that contrast nicely with the more conventionally "European" settings of the first book. We also see Jerzy, who rose from slave to apprentice vineart in the first book, getting a better idea just what he can do with his powers and what he's really up against.

Gilman leaves the characters poised for the next challenges, and the reader curious to see what they will be. This series is an ambitious step forward for Gilman.

#### CRYOBURN By Lois McMaster Bujold Baen, \$25.00 (hc) ISBN: 978-1-4516-0162-6

Here's the latest installment of Bujold's long-running chronicle of Miles Vorkosigan, whose career has evolved over several novels. At this point, he is an Imperial Auditor, something of a roving troubleshooter for his homeworld Barrayar, which has definite similarities to Czarist-era Russia.

The Vorkosigan series, which has been Bujold's most popular contribution to the

genre, is particularly interesting in the structure of the societies she portrays. Barrayar is at the same time a hereditary aristocracy and a meritocracy. Miles, who is hindered by small stature and the aftereffects of a crippling disease, almost certainly would not have gotten the opportunity to excel without the inherited privilege of being a Duke's son. On the other hand, he has risen to eminence largely because of his wits—an accomplishment that endears him to readers who more readily identify with the cerebral protagonist than with the muscular hero.

The new story opens with Miles on Kibou-daini, where he's been sent as part of a team to investigate the local cryosleep industry. Drugged and kidnapped by parties unknown, he escapes to the catacombs. There he is rescued by a young boy, Jin, who turns out to be one of a group of squatters running an unofficial cryosleep facility outside the reach of the larger commercial firms. Jin, who tends a menagerie of stray animals, takes Miles under his wing while he recovers; meanwhile, a frantic search is underway for him by embassy officials.

Miles decides to do some snooping, and figures out that the local system, in which someone entering cryosleep sells their voting rights to the company keeping them chilled, is a setup for massive corruption. The company then amasses an inordinate amount of political clout—and has no great incentive to let its clients wake up and start voting their own interests. Even more to the point, some opponents of the system have disappeared—most likely put into cryosleep against their will. One of these, evidently, is Jin's mother.

After a bit of digging, Miles decides to send Jin to inform the Barrayaran con-

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sulate that he is safe, while he does some more research. The boy makes the trip with little difficulty, and delivers his message to the dumbfounded consul, who has been trying to figure out how to deal with a missing imperial legate. But complications arise on Jin's return. He ends up with unpleasant relatives that he'd run away from earlier and with his younger sister, who's developed her own taste for the fugitive life. Eventually, they join up with Miles, who decides that finding their mother is the first order of business.

After a satisfying series of maneuvers in which Miles brings down the bad guys and leaves Jin in good hands, the book ends with a plot twist that will have significant implications for any new books in the series. It will be extremely interesting to see what Bujold does with future Miles adventures. Stay tuned.

DEEP FUTURE: The Next 100,000 Years of Life on Earth By Curt Stager Thomas Dunne, St. Martin's, \$25,99 (hc) ISBN: 978-0-316-61462-1

Stager, who teaches paleoecology at Paul Smith College in upstate New York, offers a long-range view of global climate change. Given that most popular discussions of the subject don't look beyond the next generation, it's good to see someone discussing what happens farther down the road. A particular bonus is his awareness of past warming episodes, notably the Eemian interglacial, one hundred and thirty thousand years ago, which lets him put the discussion in a perspective few meteorologists could bring to the subject.

The geological time scale is relevant in that most of the carbon dioxide generated by burning fossil fuels is here to stay. While some of it will be broken down by photosynthetic plants, the majority will be around thousands, if not tens of thousands of years from now—and the effects will occur on an equally long scale. Ice sheet collapse and sea level rise will take place over decades, if not centuries. This

is the real scope of these phenomena, unrecognized by climate change deniers who respond to a couple of inches of snow with smug remarks about Al Gore.

Stager examines both moderate and extreme scenarios, depending on the degree of carbon release. This adds a degree of subtlety to the discussion, once again an element generally lacking in popular treatments of climate change. Stager also recognizes that different latitudes will feel the results of warming unequally. As some regions become drien others may experience more rainfall. The impact may even be largely benign in some regions. For example, Greenland is likely to become a temperate climate, while much of lowland Europe fights rising sea levels.

Although a lot of the discussion by other writers has focused on polar icecaps. tropical climates will feel the impact of warming, too. Human populations in equatorial areas will be put under extra pressure from higher temperatures. Desertification is likely in some areas; in others, tropical diseases may make a comeback after long absences; there have already been cases of dengue fever in areas where it had long been thought eradicated. Malaria, long absent from the U.S. except in travelers returning from the tropics, may also make a comeback here as mosquito-friendly environments expand.

Warming isn't the only long-term issue: acidification of the oceans, a chemical reaction caused by dissolved carbon dioxide, is likely to harm many aquatic species, especially shellfish. On land, many species survived past episodes of climate change by moving north (or to higher altitudes). But in the built-up world of today, plants and animals looking for cooler climates are likely to be blocked by the human settlements in their way. For many, this will spell extinction.

Another point frequently overlooked is that we humans aren't just faced with a carbon-no carbon decision. We have the ability to moderate the release of carbon, shaping the long-range impact on cli-

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mate. While we won't be able to prevent significant global warming in the next few centuries, those who take the long view should recognize that cutting carbon emissions now can preserve our options for a future era. Saving some coal for a future millennium could give our descendents the means to prevent another ice age—a global disaster every bit as threatening to the human race as the results of warming.

Stager consistently pushes his conclusions not just to the next generation, but far down the road of consequences. So he

looks at the warming of Greenland, with its likely development into an agricultural and fishing economy. Next he looks past that warming to the recooling that will follow, and the inevitable consequences that cooling has for a population that may have no memory of the ice-bound island their forbears knew.

It's refreshing to see someone actually looking past today's balance sheet to calculate the long-term cost of carbon emissions. Highly recommended to anyone who wants to see the real impact of our continued reliance on fossil fuels.

On Books

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### SF CONVENTIONAL CALENDAR

The third weekend in October has three good belts for Asmovansa. AlbaCon (where IT be), NeomormCon and MideHiCon—glus Arcana, if you're into horror. CapClaive's good the week before (I'm there, too,). Plan now for social weekends with your favorite SF authors, editors, artists, and fellow fans. For an explanation of contemior(s), a sample of SF folkscraps, and into on farzines and cubus, and me an SASE (self-addressed, stamped if 10 [business] envisope) at 10 Hill 8/22-L, Newark NJ 07102. The hot line is 8/73 242-5999. It a machine newness (with a list of the week's corn), leave a message and IT call back on my nicket. When writing cons, send an SASE. For free listings, tell me of your con five months out. Look for me at cons behind the Fility Pierre badge, playing a musical keyboard.—Evin's S. Straus.

#### **OCTOBER 2011**

69—Sirens, For indo, write: Box 149, Sedalia CA 80135. Or phone: (973) 242-5999 (10 am to 10 pm, not collect), (Web) sirensconference.org, (E-mail) help@sirensconference.org. Con with be held in: Valid CO (if only omitted, same as in address) at the Cascade Resort. Guests Will include: Justine Larbalesier, Medi Ckorafor, Laini Taylor, Theme: Women in Fantasy Literature.

- 7-9-AkiCon, akicon.org, info@akicon.org. Hilton, Bellevue WA. Kyle Herbert, Velocity Demos, NDP Comics. Anime.
- 9-12—Spain Nat'l. Con. hispacon2010.blogspot.com. Burjassot, Spain. Many guests. Spanish-language SF, fantasy and horror.
- 14-16-Another Anime Con. anotheranimecon.com. Ilsa@anotheranimecon.com. Nashua NH.
- 14-16—CapClave. capclave.org. Hitton, Gaithersburg MD. C. Vaughn, C. Valente. "Where reading is not extinct." Written SF/fantasy.
- 20-23-BakuretsuCon, Box 5342, Essex Jct. VT 05453. bakuretsucon.org. Hampton Inn, Colchester VT. G. and C. Ayres. Anime.
- 21-23—AlbaCon, Box 2085, Albany NY 12220, albacon, org. Best Western Sovereign, J. Kessler, S. Hickman, K. Decandido, Wombal
- 21-23-MileHICon, Box 487, Westminster CO 80036. milehicon.org. Hyatt Tech Center, Deriver CO. V. Vinge, Cook, Dozois, Mather.
- 21-23-NecronomiCon, 5902 Thontosassa Rd., Plant City FL 33565. stonehill.org. Hilton Bayfront, St. Petersburg FL. Ben Bova.
- 21-23—Arcana, Box 8036, Minneapolis MN 55408, arcanacon.com. Best Western Bandana Square, St. Paul MN. The Dark Fantastic.
- 21-23—Browncoat Ball, browncoatball.com. Providence RI, "A Mighty Fine Shindig," For fans of Firefly and Serenity.
- 27-30—World Fantasy Con, wfc2011.org. Town & Country Resort, San Diego CA. Gaiman, Godwin. Salling the Sea of Imagination.
- 28-30—ICon, 308 E. Burlington, #300, lows City IA 52240, lows-icon.com, Marriott, Cedar Rapids IA, Jane Yolen, Steve Thomas,
- 29—Goblins & Gears Masquerade Ball. tearnwench.org. Michael's Eighth Avenue, Glen Burnie (Baltimore) MD. Horror and stearnpunk

#### NOVEMBER 2011

- 3-6—IlluXCon. illuxcon.com. Ramada Inn and Conference Center, Altoona PA. Fantastic illustration art.
- 4-6-ConTraflow, Box 57927, New Orleans LA 70157. contraflowscifl.org. Clarion Westbank. General SF and fantasy convention.
- 4-6—NekoCon, Box 7568, Roanoke VA 24019. nekocon.com. Hampton Roads VA. Anime and steampunk.
- 4-6-NovaCon, 379 Myrtle Rd., Sheffield S2 3HQ, UK. novacon.org.uk. The Park Inn, Nottingham (Birmingham) UK.
- 11-13—WindyCon, Box 184, Palatine IL 60078. windycon.org. Westin, Lombard (Chicago) IL. C. Asaro, Frank Hayes, Joe Bergeron.
- 12-13—HalCon. hal-con.com. World Trade and Convention Centre, Halifax NS. SF, fantasy, comics. Actors, authors, comics people.
- 18-20—PhilCon, Box 8303, Philadelphia PA 19101. philcon.org. Crowne Plaza, Cherry Hill NJ. Doctorow. Celebrating 75 years.
- 18-20—SFContario, 151 Gamma, Toronto ON M8W 4G3. sfcontario.ca. Ramada Plaza. John Scalzi, Gardner Dozois, Karl Schroeder
- 18-20—Anime USA. animeusa.org. Hyatt, Crystal City VA (near DC). Laura Bailey, Trina Nishimura, Travis Willingham, DJ Sisen.
- 25-27—LosCon, 11513 Burbank Blvd., N. Hollywood CA 91601. loscon.org. LAX Marriott, Los Angeles CA. J. de Chancie, J. Hertz.
- 25-27—DarkoverCon, Box 7203, Sliver Spring MD 20907. darkoverconorg. Near Baltimore MD. Music and alternative spirituality.

#### DECEMBER 2011

2-4—SMOFCon. smofcon29.org. Park Plaza Victoria Hotel, Amsterdam, Netherlands. Where convention organizers meet to talk shop 9-11—Starbase Indv. starbaseIndv.com. Marriott East. T. Todd. J. Acovone. J. Billingslev. D. Downey. Commercial Star Wars event.

#### JANUARY 2012

13-16—Arisia, Box 391596, Cambridge MA 02139. arisia.org. Westin Waterfront, Boston MA. Phil and Kaja Foglio. 3000+ expected.

AUGUST 2012

#### AUGUST 2012

30-Sep. 3—Chicon 7, Box 13, Skokie IL 60076. chicon.org. Chicago IL. Resnick, Morrill, Musgrave, Scalzi. WorldCon. \$155+.

ALIGHST 2013

#### 29-Sep. 2—Texas in 2013, Box 27277, Austin TX 78755, texas2013, org. San Antonio TX. The World SF Convention for 2013.

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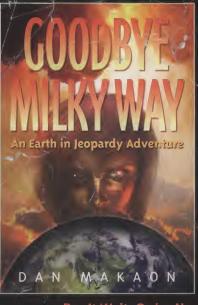


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